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Environmental Improvement Fund

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Environmental Improvement Fund

Introduction

The environmental improvement fund (EIF) comprises three separate programs: the clean water fund program, the safe drinking water loan program and the land recycling (brownfields) loan program. The programs provide financial assistance for wastewater treatment, drinking water and contaminated land cleanup projects. This paper describes background about the programs, financial assistance criteria, components of the loan and grant programs, special provisions and program administration.

The clean water fund program was enacted in 1987 Wisconsin Act 399 to provide financial assistance to municipalities for the planning and construction of surface water and groundwater pollution abatement facilities, primarily for municipal wastewater treatment. The clean water fund began providing assistance to municipalities in 1991.

The clean water fund administers financial assistance through federal and state-only funding subprograms. The state-only programs represent the Legislature's decision to exceed the federal financial commitment to surface water pollution abatement assistance. As of June 30, 2018, the clean water fund program had entered into 994 financial assistance agreements with municipalities totaling \$4.6 billion.

The safe drinking water loan program was enacted in 1997 Wisconsin Act 27 to provide financial assistance to municipalities for the planning, design, construction or modification of public water systems, if the projects will facilitate compliance with national primary drinking water regulations under the federal Safe Drinking Water Act Amendments of 1996 (SDWA) or otherwise significantly further the health protection objectives of the Act. The safe drinking water loan program

began providing assistance in 1998. As of June 30, 2018, the safe drinking water loan program had entered into 412 financial assistance agreements totaling \$708 million.

The land recycling (brownfields) loan program provided financial assistance to certain local governments for the investigation and remediation of certain contaminated properties as a subprogram of the clean water fund program. The program has not provided any loans since 2008. The land recycling loan program entered into 10 financial assistance agreements totaling \$15.2 million, which is included in the clean water fund totals.

Table 1 shows project funding for each program within the environmental improvement fund. The table shows the amount of financial assistance agreements entered into for each program by biennium. Table 1 also shows the estimated project demand for the 2019-21 and 2021-23 biennia, as estimated by the Departments of Natural Resources (DNR) and Administration (DOA) in September, 2018.

The clean water fund program and the safe drinking water loan program receive federal capitalization grants for a state revolving loan fund, for which Wisconsin provides a 20% match. Prior to 2016 the state match for the clean water fund federal grant was made through issuance of general obligation bonds [with debt service costs primarily paid by general purpose revenues (GPR) and interest on program loan repayments for clean water debt service (SEG)]. Effective in 2016, the state modified the clean water fund program to provide the state match for the clean water fund program through issuance of revenue obligation bonds. The clean water fund program also provides funds for financial assistance through revenue bonds and repayments of prior clean water fund loans. The state match for the safe

Table 1: Environmental Improvement Fund, Financial Assistance Agreements by Biennium (\$ in Millions)

Biennium	Clean Water Fund Program	Safe Drinking Water Loan Program	Land Recycling Loan Program	Total
1989-91	\$152.6			\$152.6
1991-93	395.8			395.8
1993-95	188.5			188.5
1995-97	224.3			224.3
1997-99	214.9	\$53.0		267.9
1999-01	222.9	19.8	\$1.9	244.6
2001-03	502.9	20.0	8.0	530.9
2003-05	252.9	74.6	1.8	329.3
2005-07	380.9	43.1	2.7	426.7
2007-09	500.9	73.2	0.8	574.9
2009-11	461.4	88.7	0.0	550.1
2011-13	393.0	83.1	0.0	476.1
2013-15	266.1	96.4	0.0	362.5
2015-17	295.3	95.9	0.0	391.3
2017-18 actua	al* 142.5	60.3	0.0	202.8
2019-21 est** 2021-23 est**		138.6 122.8	0.0 0.0	784.4 858.9

^{*} Actual 2017-18. Additional financial assistance agreements will be entered into during 2018-19. DNR and DOA estimated project needs during the 2017-19 biennium as \$618.0 million for CWF and \$128.2 million for SDW projects.

drinking water loan program is provided with general obligation bonds, with debt service costs paid by GPR.

State GPR debt service costs for the environmental improvement fund general obligation bonds were \$18.2 million in 2016-17 and \$15.0 million in 2017-18, and are budgeted at \$15.5 million in 2018-19. In addition, the state paid \$8.0 million SEG annually from clean water fund program loan repayments for debt service.

DOA administers certain aspects of the financial management of the environmental improvement fund and DNR administers all other loan and

grant provisions. The environmental improvement fund programs are authorized by statute under s. 281.58 through s. 281.625 and s. 234.86, and administered through administrative rules NR 162, NR 166, NR 167 and ADM 35.

Other informational papers prepared by the Legislative Fiscal Bureau discuss additional aspects of the state's efforts to provide financial assistance to address surface water pollution concerns. (See the Legislative Fiscal Bureau's informational papers entitled, "Private Onsite Wastewater Treatment System Grant Program" and "Nonpoint Source Water Pollution Abatement and Soil Conservation Programs.")

^{**} DNR and DOA estimated project need in the September, 2018, biennial finance plan.

CLEAN WATER FUND PROGRAM

Project Eligibility and Priority

General Purposes for Assistance

The clean water fund program may provide financial assistance to municipalities for three general purposes. "Municipality" means any city, town, village, county, county utility district, town sanitary district, public inland lake protection and rehabilitation district, metropolitan sewerage district, or tribe. Eligible purposes include:

Sewage Treatment. Planning, designing, constructing, replacing or maintaining a treatment facility (defined as any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or liquid industrial waste, including intercepting sewers, outfall sewers, and sewage collection systems).

Nonpoint Source **Pollution** Abatement. Implementing a nonpoint source pollution control management plan established under the federal Water Quality Act of 1987. Currently, state financial assistance for the abatement of nonpoint source pollution is primarily provided by a separate program. (See the Legislative Fiscal Bureau's informational paper entitled, "Nonpoint Source Water Pollution Abatement and Soil Conservation Programs.") Nonpoint source pollution is water pollution not attributable to a single, well-defined point of origin but which is carried by rainfall or snowmelt from a variety of sources, such as from storm water runoff, farm fields, barnyards, construction sites, highways, city streets and parking lots. The clean water fund program has entered into 26 financial assistance

agreements for nonpoint source pollution abatement or storm water projects, but none since 2012.

National Estuary Conservation Plan. Developing a conservation plan related to the national estuary program established under the federal Water Quality Act of 1987. Although the state clean water fund program has not yet provided assistance for this purpose, it was included in the state law to provide maximum flexibility if federal law changes were made. For Wisconsin, Great Lakes estuaries (the portions of the Great Lakes that extend inland to meet the mouth of a river) could become eligible for federal assistance.

Appendix I provides a glossary of key terms related to wastewater treatment. Appendix II includes a description of wastewater treatment systems. Appendix III describes the biennial finance planning process for environmental improvement program projects.

Eligible Types of Projects

DNR and DOA are authorized to provide financial assistance for the following types of projects:

Compliance Maintenance. Projects to prevent a significant violation of an effluent limitation by a municipal sewage treatment facility.

New or Changed Limits. Projects to achieve compliance with an effluent limitation that is new or is changing, if the project is for a municipality that is not a violator of the specific limit that is changing. For example, if the limit for ammonia discharge is changing, and a municipality is

complying with its existing permit with regard to ammonia, it is not considered a violator for the purposes of this eligibility requirement.

Unsewered Communities. Projects to provide treatment facilities and sewers for unsewered areas.

Nonpoint and Storm Water. Projects to prevent or treat nonpoint source pollution or urban storm water runoff. As of June 30, 2018, the program has funded 26 urban storm water or nonpoint projects for \$23,414,900, but none since 2012.

Violator. Projects to plan, design, construct or replace treatment works that violate effluent limitations contained in an existing permit. A "violator" is a municipality not in substantial compliance with the enforceable requirements of its discharge permit, for a reason that the DNR determines is within the control of the municipality.

Pilot Projects. Projects that are consistent with requirements federal for nontraditional wastewater treatment projects that help municipalities meet water quality requirements consistent with the federal Clean Water Act. This use was authorized in 2013 Wisconsin Act 7. DNR anticipates that this might include projects identified in adaptive management plans. Adaptive management programs are intended to allow multiple entities to collaboratively meet water quality standards by focusing funding and activities on sources whose contributions of a particular pollutant or pollutants can be reduced or eliminated most costeffectively. For example, point sources, such as wastewater treatment plants or industrial facilities, may have discharges that can be identified and monitored, but pursuing additional reductions may be technologically difficult and significantly expensive. At the same time, point sources may be able to work with nearby nonpoint sources that may have relatively fewer pollution controls and, therefore, may be able to manage their runoff with more basic, lower-cost practices to help meet overall water quality standards for area waters.

Criteria Used to Prioritize Projects

Administrative rule NR 162 establishes a priority ranking system which scores each project. The system ranks projects in the event funding is not available for all requested projects in a given year. NR 162 rule changes effective for projects funded in 2016-17 and subsequent years specify that projects shall be scored under one of the following three categories: (a) sewage collection systems; (b) wastewater treatment plants; or (c) storm water projects. Sewage collection systems and wastewater treatment plants receive the highest number of priority points for projects DNR determines are necessary to prevent a municipality from significantly exceeding an effluent limitation in a wastewater discharge elimination permit. Projects also receive a higher number of points if they eliminate human health hazards, install sewers in previously unsewered areas, result in increased regionalization of wastewater treatment, or are storm water projects in municipalities that have a storm water discharge permit.

The administrative rule specifies that DNR shall establish criteria and associated points for various water quality parameters in the annual clean water fund intended use plan, which is submitted to the United States Environmental Protection Agency (EPA) in order to receive federal funding for the program. Points are assigned to a project based on the current facility effluent limits for various water quality parameters for biochemical oxygen demand, total suspended solids, phosphorus, and other effluent types. For example, a project that has a more stringent (lower) effluent limit for a substance would receive a higher score than a project that has a higher limit. Effective for projects funded starting in 2017-18, DNR added criteria in the intended use plan to provide additional priority points for projects that result in a regionalized wastewater treatment plant.

Emphasis on Prevention of Discharge Violations

Facilities discharging waste to state waters are required to operate under a Wisconsin pollution discharge elimination system (WPDES) permit issued by DNR. These permits establish requirements a municipality must meet for each point source of pollution. If that standard is being exceeded at the time the permit is issued, the permit provides a compliance schedule, which is a legally binding step-by-step set of requirements regarding how and when a municipality is to achieve compliance with the permit.

Compliance Maintenance Program. DNR administrative rules include a compliance maintenance program which encourages and, where necessary, requires municipalities to take necessary actions to avoid water quality degradation and prevent violations of WPDES permit effluent limits.

Annual Report. Municipalities must submit annual reports to the DNR assessing the physical condition and performance of their sewerage systems. The report contains a point system component to identify whether voluntary or required actions are needed to maintain or improve the existing sewerage system. Under the point system, three action levels are established: (a) "voluntary range," where the municipality may initiate longer range planning for new, upgraded or additional treatment facilities; (b) "Department recommendation range," where DNR notifies the municipality that an "operation and needs review" is recommended; and (c) "Department action range," where DNR requires the municipality to complete an operation and needs review, and to implement any needed action.

Project Scoring. Projects needed to maintain compliance with existing permit limitations receive the highest priority score.

Revised Contaminant Limits. Over several years, federal and state requirements for

contamination limits for both drinking water and surface water have become more stringent and have included contaminants not previously regulated. In response, DNR promulgates new or revised administrative rules for groundwater and surface water establishing new or modified limits for toxic substances, heavy metals, and other contaminants. To assist municipalities in achieving compliance with newly added permit limitations for substances such as toxics, the program gives these project types priority second only to compliance maintenance projects when assigning priority scores.

Financial Assistance Criteria

Types of Financial Assistance

Under the clean water fund program, municipalities may receive financial assistance in the form of loans, refinancing, guarantees, purchase of insurance, credit enhancement or grants, as follows:

- a. Provide loans at or below market interest rates.
- b. Purchase or refinance the debt obligation of a municipality incurred for municipal treatment facilities that would otherwise be eligible under the clean water fund program.
- c. Guarantee or purchase insurance for municipal obligations for the construction or replacement of a treatment facility if the guarantee or insurance would improve a municipality's access to the credit market, or reduce the interest rate the municipality would otherwise receive.
- d. Make payments to the Board of Commissioners of Public Lands to reduce principal or interest payments, or both, on loans made to municipalities by the Board for projects

that would otherwise be eligible under the clean water fund program.

e. Provide principal forgiveness (grant) for a portion of project costs for certain projects financed with federal funds. Eligible projects can receive principal forgiveness of up 70% of project costs, depending on a municipality's population, median household income, county unemployment rate, and population trend.

Limitations and Conditions on Financial Assistance

Under certain circumstances, eligibility for financial assistance from the clean water fund program is restricted, as indicated below:

Previous Compliance. A municipality is not eligible if it has failed to substantially comply with the terms of a federal or state grant or loan previously received for wastewater collection, transportation, treatment or disposal.

Reserve Capacity. Reserve capacity is extra wastewater system capacity not currently needed, but constructed to take future growth into consideration. To be eligible for financial assistance, except a market-rate loan, the amount of reserve capacity included in a project is limited to the future capacity needed to serve the users expected within the sewer service area of the project 10 years after the project becomes operational. The amount of reserve capacity is also limited to the future capacity required to serve the need expected to exist outside of the sewer service area of the project area for septage that is reasonably likely to be disposed of in the project 10 years after the project becomes operational.

Future Development. Public sanitary sewer mains, interceptors and individual systems that exclusively serve future development are not eligible.

Most Cost-Effective Alternative. Financial

assistance may be provided for a project only if that project is the most cost-effective alternative for the municipality.

Sewer Lines. The connection laterals and sewer lines that transport wastewater from individual structures on private property to public sewer lines in the street or to on-site treatment systems are not eligible.

Violators. The portion of a project designed to address a WPDES permit violation receives market interest rate loans. The purpose of this restriction is to encourage municipalities to develop plans and begin construction before any pollution limitation violations occur and thus minimize any harmful effects to the environment.

Industrial Wastes. Financial assistance for the portion of a project used to treat industrial wastes may only be provided at the market interest rate.

Length of Loans. The federal Water Resource Reform and Development Act of 2014 (WRRDA), authorizes (but does not require) states to allow 30-year loan agreements if they do not exceed the projected useful life of project components. Under 2017 Wisconsin Act 59, the allowable loan repayment period was extended from no longer than 20 years after the date of the financial assistance agreement, to no longer than 30 years, or the useful life of the project, whichever is less, as determined by DOA. DOA and DNR have agreed that DNR will determine whether a project's useful life equals or exceeds 30 years to determine whether the project will be eligible for a 30-year loan. As of June 30, 2018, the program has not entered into any 30-year financial assistance agreements.

Local Financial Administration. To be eligible for a clean water fund loan, each municipality must: (a) establish a dedicated source of revenue for repayment of any financial assistance (except grants made under financial hardship or principal forgiveness provisions); (b) pledge any security required by DNR or DOA administrative rules; (c) develop an operation and maintenance program

for the treatment facility; and (d) develop a system of user charges in compliance with federal law to ensure that each user of the treatment work pays its proportionate share of the operation and maintenance costs. (An exemption may be issued for a city or village that imposes a system of charges based on assessed property values, if it is served by a regional wastewater treatment plant operated by a metropolitan sewerage district.)

Limit Per Municipality. No municipality may receive funding that would exceed 35.2% of the total amount that DOA projects will be available to provide financial assistance during the biennium.

Unsewered Communities. Construction projects in unsewered communities receive a reduced interest rate loan only if two-thirds of the initial wastewater flow originating from the area was from residences that were in existence for at least 20 years prior to the submission of the application to DNR. This is known as the "two-thirds rule." Projects for unsewered communities that do not meet this criterion are eligible only for assistance at market interest rates or an equivalent.

Prior to enactment of 2015 Wisconsin Act 55, construction projects in unsewered areas could

receive a reduced interest rate only if two-thirds of the initial flow originated from wastewater from residences that were in existence prior to October 17, 1972. The change made in 2015 Act 55 immediately expanded eligibility for a reduced interest rate to certain unsewered communities constructed after October 17, 1972.

Federal Requirements. The federal WRRDA requires recipients of loans awarded after October 1, 2014, to adhere to certain federal requirements related to use of accounting standards, Davis-Bacon wage payments, use of American iron and steel, cost-effectiveness, and water and energy efficiency. Loan applications submitted on or after October 1, 2014, are required to develop a fiscal sustainability plan, which inventories and manages assets that are a part of the treatment works, and evaluates water and energy conservation components of the project.

Application Process

In order to be considered for clean water fund program assistance, a municipality must meet the application and construction deadlines listed in Table 2. A municipality may not submit more than one application for any single project in any 12-month period, except for applications for financial

Table 2: Application and Construction Deadlines for Clean Water Fund Program Financial Assistance

Deadline Action Required

Eight months before beginning of fiscal year in which financial Municipality notifies DNR of its intent to apply for financial assistance.

assistance will be requested (October 31).*

Anytime during year. Municipality submits regular application, design plans and specifications.

Within eight months of Municipality signs CWF financial assistance agreement.

application acceptance.

^{*} If the administering agencies determine that the amount of funds projected to be available to provide financial assistance is insufficient to fund all projects for which applications will be approved during the biennium, the program would revert to an annual funding cycle. Funds would be allocated based on environmental priority scores. Municipalities would be required to submit complete applications by September 30 of affected years.

assistance for additional costs of an approved project. Projects are funded on a continuous funding cycle. For years when funds are available for principal forgiveness, applications for principal forgiveness are due by September 30 of the fiscal year in which financial assistance is being requested. Beginning with applications submitted by the September 30, 2018, deadline for financial assistance in 2018-19, municipalities are required to submit applications using the DNR online application system.

Loan Interest Rates

The interest rate on a municipality's loan under the clean water fund program is determined by the type of project, the financial capability of the municipality and other special provisions. This section discusses how interest rates are established.

Interest Rates and Project Types. The statutes require that the loan interest rate set for each application be based on the type of project. Projects in municipalities with a low population and lower household income also receive a lower interest rate.

Current law establishes interest rates as a percent of the market interest rate and specifies which project type receives which interest rate. The market rate is the interest rate of state revenue bonds or the interest rate determined by DOA. Table 3, Section A, lists the project types by interest rate. DNR and DOA may request the Legislature's Joint Committee on Finance to modify the loan interest rates as a percent of the market rate. However, to date, the agencies have not requested any Committee action. Table 3 shows that the interest rate as a percent of the market interest rate has changed during the past several biennia. State subsidy for a project is higher if the interest rate paid by a municipal borrower under the program is a lower percent of the market interest rate. Under 2017 Act 59, the amount of state financial assistance for most projects was increased for projects funded in the 2017-19 biennium, by decreasing the interest rate from 70% to 55% of the market interest rate.

The actual loan interest rate paid by a municipality partly depends on the market rate at the time the financial assistance is allotted to the project. DOA determines the effective market interest rate that would have been paid if a fixed-rate revenue obligation had been issued on the date financial assistance is allotted. DOA issues a determination of the market interest rate on a quarterly basis. Table 3 lists the program loan interest rates prior to the 2009-11 biennium, and in each biennia since then. DOA designated a 3.4% market interest rate for April 1, 2018, through December 31, 2018.

Market-rate loans are provided to the portion of a project: (a) designed to address a WPDES permit violation; (b) serving industrial flow or future growth beyond 10 years; (c) that is an unsewered area not meeting the two-thirds rule; or (d) that is subject to sanctions related to failure to meet certain federal or state Disadvantaged Business Enterprise solicitation requirements.

The actual interest rate for a specific project may be a composite of the interest rates listed in Table 3. This occurs if the project includes components that are associated with different interest rates. For example, an adjustment is often made for the project costs that are associated with industrial discharges. These costs would be funded at 100% of the market interest rate.

Disadvantaged Municipalities. Under 2017 Act 59, two lower interest rate categories were created, effective for financial assistance provided as of 2017-18, for municipalities with low population and income. DNR and DOA use the term "disadvantaged" municipalities for the interest rate category created by the act, which offers 33% of the market rate for municipalities with: (a) population less than 10,000; and (b) median household income of 80% or less of the statewide median household income. The program uses the term "extremely disadvantaged" municipalities to provide an interest rate of 0% for municipalities with:

Table 3: Clean Water Fund Program Loan Interest Rates by Project Type

A. Percent of Market Rate					
	Prior to		2011-13		
Project Category	2009-11	2009-11	and 2013-15	2015-17	2017-19
Compliance maintenance/					
New and changed limits	55%	60%	75%	70%	55%
Storm water/nonpoint	65	65	75	70	55
Unsewered	70	70	75	70	55
Violator, reserve capacity,	, ,	, 0	, 0	, 0	
industrial flow or unsewered					
not meeting two-thirds rule	100	100	100	100	100
Hardship	Variable	Variable	Variable	Variable	NA
Hardship grants	Grant	Grant	Grant	Grant	Grant
Principal forgiveness	Grant	Grant	Grant	Grant	Grant
Pilot project	NA	NA	NA	NA	NA
Septage treatment and capacity	0	0	0	0	0
Disadvantaged: population < 10,0	000;				
MHI 80% or less than state MI		NA	NA	NA	33
Extremely disadvantaged: popula	ation				
<1,000; MHI 65% or less than	state				
MHI*	NA	NA	NA	NA	0
B. Interest Rate					
b. Interest Rate			2011-13		
Project Category	2007-09	2009-11	and 2013-15	2015-17**	2017-19**
	2007 07	2007 11	una 2013 13	2013 17	2017 17
Compliance maintenance/					
New and changed limits	2.365%	2.4%	2.625%	2.1%	1.87%
Storm water/nonpoint	2.795	2.6	2.625	2.1	1.87
Unsewered	3.010	2.8	2.625	2.1	1.87
Violator, reserve capacity,					
industrial flow or unsewered				• 0	
not meeting two-thirds rule	4.3	4.0	3.5	3.0	3.4
Hardship	0.0 to 4.3	0.0 to 4.0	0.0 to 3.5	0.0 to 3.0	NA
Hardship grants	Grant	Grant	Grant	Grant	Grant
Principal forgiveness	Grant	Grant	Grant	Grant	Grant
Pilot project	NA	NA	0.0	0.0	0.0
Septage treatment and capacity	0.0	0.0	0.0	0.0	0.0
Disadvantaged*	NA	NA	NA	NA	1.122
Extremely disadvantaged*	NA	NA	NA	NA	0

NA = Not Applicable; MHI = Median household income

(a) population less than 1,000; and (b) median household income of 65% or less of the statewide median household income. For 2017-18, the program calculated 80% of median household income as \$42,454, and 65% of median household income as \$34,543. For 2018-19, the program calculated 80% of median household income as \$42,952 and 65% of median household income as \$34,949.

Transition Loan Interest Rates. As part of the transition from the predecessor point source grant program to the clean water fund program, a specific group of communities was guaranteed 2.5% interest rate loans. To receive this reduced interest rate for a project, the community, at the time of the transition to the clean water fund loan program, either had: (a) grant applications pending under the former grant program for the

^{*}Disadvantaged and extremely disadvantaged categories first available in 2017-19.

^{**}DOA reviews the interest rate quarterly. For 2015-17, the market interest rate for April 1, 2016, through September 30, 2016, was 3.0%. For 2017-19, the market interest rate for April 1, 2018, through December 31, 2018, was 3.4%. 2017 Act 59 eliminated hardship assistance and created two below-market interest rates for municipalities with small population and low income, shown as disadvantaged and extremely disadvantaged.

project; or (b) had a staged compliance schedule, which affected only the Milwaukee Metropolitan Sewerage District (MMSD). Financial assistance agreements of \$345.0 million were entered into for eligible transition period projects before 2003, including \$230.4 million for MMSD. No financial assistance agreements for transition loans have been entered into since that time.

Hardship Project Interest Rates. Prior to the 2017-19 biennium, projects that met certain criteria were eligible for a combination of grants and loans, with interest rates as low as 0% and grants for up to 70% of project costs. A combination of grant and loan was provided to reduce the municipality's residential wastewater treatment charges to 2% of the median household income of the municipality. Under 2017 Act 59, the hardship component of the program was eliminated, effective with projects financed in the 2017-19 biennium.

Pilot Project Interest Rates. 2013 Act 7 authorized pilot projects and did not specify what interest rate could be charged. DNR and DOA designated an interest rate as low as 0% for pilot projects that address water quality issues consistent with the federal Clean Water Act. As of June 30, 2018, the program has not funded any pilot projects.

Septage Management Interest Rates. Projects receive a 0% interest rate for the portion of a loan related to septage receiving, storing and treatment capacity. As of June 30, 2018, the program has funded 24 projects with \$22,091,300 in septage treatment costs.

Principal Forgiveness. Federal provisions under the American Recovery and Reinvestment Act of 2009 (ARRA), and federal grants received by the state for federal fiscal year (FFY) 2010 and subsequent years, authorize forgiveness of a portion of the loan principal. 2013 Act 7 authorizes principal forgiveness on an ongoing basis in years that it is allowed under federal provisions.

Prior Use of Present Value Subsidy Limit

The original clean water fund program law included a financial control mechanism called the "present value subsidy" limit as a cap on the sum of all assistance provided through the clean water fund program in a biennium. The "present value subsidy" represented the cost, in current year dollars, to provide 20 years of subsidy for all financial assistance provided during the biennium. Under 2015 Act 55, the use of present value subsidy limit was eliminated. As of 2015-17, the program allocates "financial assistance" instead of "subsidy" to projects.

Loan and Grant Programs

The clean water fund program provides financial assistance to municipalities through loans and limited grants. The state's clean water fund program is broader in scope than what is required to meet federal Water Quality Act requirements. The clean water fund program includes the federal direct revolving loan program and state-only components of proprietary loans and small project loans.

The amount of funding and interest rate received by municipalities is determined for all projects based on the program criteria previously discussed (such as project type and priority level).

The program has entered into 994 financial assistance agreements totaling \$4.6 billion as of June 30, 2018, including \$129.7 million for hardship grant awards. Table 4 shows the amount of financial assistance agreements entered into in every fiscal year between 1990-91 (the first year the program entered into financial assistance agreements) and 2017-18. Table 4 includes the \$15,218,891 in financial assistance agreements for land recycling loans described in a later section of this paper. Appendix IV lists the total amount of financial assistance agreements provided to municipalities.

Table 4: Clean Water Fund Program, Financial Assistance Agreements by Fiscal Year

State Fiscal Year	Grant and Principal Forgiveness	Loan	Total
1000.01	Φ0	¢152 (20 (4)	¢150 (20 (4)
1990-91	\$0	\$152,620,646	\$152,620,646
1991-92	10,144,503	252,605,656	262,750,159
1992-93	20,584,960	112,492,580	133,077,540
1993-94	11,469,235	76,354,193	87,823,428
1994-95	7,681,464	92,961,017	100,642,481
1995-96	14,587,588	82,654,586	97,242,174
1996-97	1,284,877	125,730,689	127,015,566
1997-98	1,956,066	92,745,736	94,701,802
1998-99	11,938,555	108,298,122	120,236,677
1999-00	0	109,726,508	109,726,508
2000-01	696,993	114,349,164	115,046,157
2001-02	16,733,379	293,301,555	310,034,934
2002-03	1,500,864	199,390,425	200,891,289
2003-04	1,791,314	77,151,927	78,943,241
2004-05	4,893,698	170,831,796	175,725,494
200.05	1,075,070	170,031,770	175,725,151
2005-06	1,695,582	216,165,572	217,861,154
2006-07	1,444,516	164,297,841	165,742,357
2007-08	80,000	278,238,713	278,318,713
2008-09	2,762,550	220,590,023	223,352,573
2009-10	104,808,217*	, ,	278,708,375
2010-11	2,380,493	180,275,927	182,656,420
2011-12	7,075,336	221,233,898	228,309,234
2012-13	3,945,314	160,740,920	164,686,234
2013-14	5,439,866	143,945,963	149,385,829
2013-14	1,711,964	115,046,341	116,758,305
2014-13	1,711,704	113,040,341	110,730,303
2015-16	5,805,629	209,136,759	214,942,388
2016-17	20,111,804	60,282,976	80,394,780
2017-18	13,812,116	128,676,845	142,488,961
Total	\$276,336,883	\$4,333,746,536	\$4,610,083,419

^{*} Includes grants and principal forgiveness under the federal American Recovery and Reinvestment Act of 2009.

The total amount received by individual municipalities for financial assistance ranges between \$18,851 and \$1,397 million. The Milwaukee Metropolitan Sewerage District, the largest recipient of clean water fund loans, accounted for 30.3% of the cumulative financial assistance amount as of June 30, 2018.

Federal Direct Loans

One subprogram of the clean water fund

program is the federal direct loan component. The federal Water Quality Act of 1987 makes grants available to states for a state revolving loan fund. The individual states that choose to participate receive a percentage of the total federal funds available each year. These funds can then be loaned by the states to municipalities to use for water quality planning and pollution abatement projects. These funds are termed "revolving" because the federal act requires that municipal repayments of these loans must be deposited back into the fund, thus providing a source of future loans for other municipalities.

Intended Use Plan and Annual Report. To receive the state's share of the federal capitalization grant, the state must provide an annual plan to the federal Environmental Protection Agency (EPA) that identifies the intended uses of the amounts in its revolving loan fund for the following fiscal year. At the conclusion of each fiscal year, the state is required to provide an annual report to the EPA describing how the state has met the goals and objectives for the previous year. EPA reviews the state program annually and audits the revolving loan fund, or requires the state to have an independently conducted audit. The state must demonstrate that the federal portion of the revolving loan fund and the state match are being maintained in perpetuity.

Eligible Uses Of Federal Funds. Federal law establishes three categories of eligible uses for federal funds: (a) the construction of publicly-owned treatment works; (b) control of nonpoint source pollution; and (c) national estuary conservation plans.

To be eligible for assistance from the direct loan program, the municipality's project must be: (a) a publicly-owned treatment work; (b) consistent with areawide water quality management plans and nonpoint watershed plans; and (c) on the state's priority list.

Funding Structure. To receive federal capitalization grants, the state must contribute an amount equal to at least 20% of the federal grant amount. Wisconsin's state match was provided with general obligation bond proceeds prior to federal fiscal year 2016 (state fiscal year 2016-17). General obligation bonds are repaid from the state's general fund taxes and loan repayments on clean water fund loans. In addition, the program had used the proceeds of clean water fund revenue bonds to leverage a larger amount of capital to make loans to municipalities for eligible projects.

In October, 2015, EPA and the Wisconsin Building Commission approved a new funding structure for the direct loan subprogram. Under the new structure, provision of the state match beginning in federal fiscal year 2016 is provided from environmental improvement fund revenue obligations instead of general obligation bonds. The state issued environmental improvement fund revenue obligations beginning in December, 2015. As of June, 2017, the program moved all loans previously made with the proceeds of clean water fund revenue bonds and general obligation bonds to the new direct loan subprogram. All new clean water fund loans made as of 2015-16 have been made within the new funding structure.

Under the direct loan program structure, the proceeds of the EIF revenue bonds, and interest repayments of loans made with the revenue bonds and future federal grants, are used for payment of future state match (but not for payment of debt service on prior state match from general obligation bonds).

The state issues environmental improvement fund revenue bonds to provide capital to make loans to municipalities for eligible projects. Revenue bond proceeds also pay bond issuance and administrative expenses associated with issuance of the bonds. Municipalities borrow money under the direct subprogram, including at lower than market interest rates, and use the loans for the costs of planning, design and construction of pollution

abatement facilities. The repayment of the revenue bonds comes from: (a) municipality repayment of loans funded from the EIF revenue bonds; (b) interest repayments on loans made with federal capitalization grants; and (c) in cases of default, state aid otherwise paid to a municipality may be utilized.

Bond holders are provided security for their investments through a state aid intercept provision. Under s. 281.59(11) of the statutes, in the event of default on a loan, the clean water fund has the authority to intercept state aid payments made to that municipality and use those funds to pay the bond holders. In addition, the state may apply an additional charge to the amount of property taxes levied by the county in which the applicable municipality is located.

The state must also meet federal regulations related to procurement, accounting and financial management. State funding in the clean water fund program, other than the required 20% state matching funds, is not subject to these restrictions.

The State's September, 2018, Intended Use Plan for the EPA federal fiscal year 2018 capitalization grant for funding during state fiscal year 2018-19, and the September, 2018, biennial finance plan, indicate that the 20% state match to the federal capitalization grant will be generated from revenue bonds issued under the new direct subprogram structure.

Types of Assistance Available To Municipalities. In addition to restrictions on the broad categories of uses for capitalization grants, there are federal limitations on the types of assistance that may be provided to municipalities with the federal component of the clean water fund and the associated state match. Federal acts have allowed for forgiveness of loan principal for funds provided in federal fiscal year 2009 and subsequent years. Previously, states were not permitted to use the federal funds or the state match to provide grants to municipalities.

The federal capitalization grants and state match funds may be used to:

- 1. Make loans, on the conditions that: (a) the loans are made at or below market interest rates; (b) the terms do not exceed 20 years, or do not exceed the lesser of 30 years or the projected useful life of project components; (c) the municipality that is the recipient of the loan must establish a dedicated source of revenue for repayment; and (d) the fund will be credited with all payments of principal and interest on all loans. (The federal Water Resource Reform and Development Act of 2014 authorizes, but does not require, states to allow 30-year loan agreements if they do not exceed the projected useful life of project components.)
- 2. Buy or refinance the debt obligation of municipalities incurred after March 7, 1985 (the date the U.S. Senate began considering the Water Quality Act of 1987), for the purpose of constructing a treatment facility otherwise eligible under this program.
- 3. Guarantee, or purchase insurance for, local debt obligations if doing so improves the municipality's access to the credit market, or reduces its interest rate.
- 4. Provide loan guarantees for similar revolving funds established by municipalities.
- 5. Provide forgiveness of loan principal (grants) for projects funded under federal fiscal year 2009 and subsequent years. DNR and DOA limit principal forgiveness for a municipality to between 15% and 70% of the amount of the eligible project costs, depending on the population and median household income of the municipality, with a maximum of \$750,000 per municipality.

Federal Funding Levels. In the Water Quality Act of 1987, Congress authorized initial funding with federal capitalization grants for state revolving loan programs for the period from federal fiscal year (FFY) 1989 through 1994. From FFY

1989 through 1994, Wisconsin received 2.7342% of the total available capitalization grant funds nationwide. Federal funding in FFY 1995 through 2018 for state revolving loan programs has been provided through annual appropriations at the same percentage allocation of the total, and the Water Quality Act has not been reauthorized.

The revolving fund can be used to finance the costs of administering the fund, including only those activities related to federally funded projects. Prior to enactment of the WRRDA, the state was permitted to set aside not more than 4% of federal grants received for these administrative purposes. Upon enactment of the WRRDA, states can use the greater of 4% of the federal grant, \$400,000, or 0.2% of the current valuation of the state's revolving fund per year.

Table 5 lists federal capitalization grants and annual appropriations received to date, including: (a) federal grants for direct loans to municipalities; (b) federal funds provided for grants or principal forgiveness; (c) the amount used for administration; and (d) the required 20% state match provided from the issuance of general obligation bonds (prior to federal fiscal year 2016) or EIF revenue obligations (beginning in federal fiscal year 2016).

Provisions for Federal Fiscal Year 2009 and Subsequent Years. Under the federal American Recovery and Reinvestment Act (ARRA) of 2009, DNR and DOA received a one-time grant of \$104 million used to provide principal forgiveness to certain eligible projects. The federal capitalization grants for FFY 2010 through 2018 include requirements related to principal forgiveness and priority for green projects. The federal requirements allow states to use up to 30% of the federal capitalization grant for principal forgiveness, if the nationwide appropriation exceeded \$1 billion. In addition, the federal appropriations for FFY 2016 through 2018 require states to allocate 10% of their capitalization grant as additional subsidy. EPA interpreted the two provisions to be additive.

Table 5: Federal Direct Loan Program - Federal Grants and State Match

Federal Funding							
Fiscal Federal	Year State	Loans	Grants and Principal Forgiveness	Administration	Subtotal r Federal	State Match	Federal and State Total
1989	1990	\$24,479,500		\$1.020.000	\$25,499,500	\$5,099,900	\$30,599,400
1990	1991	25,398,100		1,058,300	26,456,400	5,291,300	31,747,700
1991	1991	53,437,900		2,226,600	55,664,500	11,132,900	66,797,400
1992	1993	50,427,000		2,101,100	52,528,100	10,505,600	63,033,700
1993	1994	49,883,600		2,078,500	51,962,100	10,392,400	62,354,500
1994	1995	30,952,100		1,289,700	32,241,800	6,448,300	38,690,100
1995	1996	31,966,900		1,332,000	33,298,900	6,659,800	39,958,700
1996	1997	52,362,700		2,181,800	54,544,500	10,908,900	65,453,400
1997	1998	16,175,000		674,000	16,849,000	3,369,800	20,218,800
1998	1999	34,947,800		1,456,200	36,404,000	7,280,800	43,684,800
1999	2000	38,382,500		1,599,300	39,981,800	7,996,400	47,978,200
2000	2001	34,832,300		1,451,300	36,283,600	7,256,700	43,540,300
2001	2002	34,522,500		1,438,400	35,960,900	7,192,200	43,153,100
2002*	2003	34,681,800	\$1,212,900	1,441,600	37,336,300	7,224,700	44,561,000
2003	2004	34,517,400		1,432,300	35,949,700	7,229,200	43,178,900
2004	2005	34,395,400		1,433,100	35,828,500	7,165,700	42,994,200
2005	2006	27,966,700		1,165,300	29,132,000	5,826,400	34,958,400
2006	2007	22,726,900		947,000	23,673,900	4,734,800	28,408,700
2007	2008	27,777,400		1,157,400	28,934,800	5,787,000	34,721,800
2008	2009	17,660,700		735,900	18,396,600	3,679,300	22,075,900
2009**	2010	17,660,600	103,967,400	2,716,800	124,344,800	4,075,500	128,420,300
2010	2011	44,630,000	8,249,700	2,203,300	55,083,000	11,016,600	66,099,600
2011	2012	34,624,800	3,699,300	1,596,800	39,920,900	7,984,200	47,905,100
2012	2013	33,494,500	3,185,200	1,528,300	38,208,000	7,641,600	45,849,600
2013	2014	32,542,800	2,550,200	1,000,000	36,093,000	7,218,600	43,311,600
2014	2015	33,810,900	3,094,100	1,000,000	37,905,000	7,581,000	45,486,000
2015	2016	24,350,400	11,313,300	2,047,300	37,711,000	7,542,200	45,253,200
2016	2017	19,601,300	14,448,400	2,071,300	36,121,000	7,224,200	43,345,200
2017	2018	18,707,700	14,337,200	2,798,100	35,843,000	7,168,600	43,011,600
2018	2019	24,054,900	17,356,800	1,980,300	43,392,000	8,678,400	52,070,400
Total		\$960,972,100	\$183,414,500	\$47,162,000	\$1,191,548,600	\$217,313,000	\$1,408,861,600

^{*} Includes grant under a former one-time federal rural communities hardship grants program.

The federal Water Resources Reform and Development Act of 2014 also required states to consider affordability criteria beginning with state fiscal year 2015-16. These criteria include household income, unemployment data, and population trends.

DNR and DOA established a maximum amount of principal forgiveness per municipality

per year. For the 2016-17 and 2017-18 funding cycles, the municipality cap was \$650,000, or up to \$750,000 in counties with an unemployment rate greater than the state's unemployment rate.

For the 2018-19 funding cycle, the intended use plan increased the municipality cap for "regular" principal forgiveness to \$750,000, and eliminated additional principal forgiveness based on

^{**} Includes federal American Recovery and Reinvestment Act of 2009 funding.

the county's unemployment rate. In addition, in 2018-19, municipalities may receive "priority" principal forgiveness for: (a) regionalization projects where at least one wastewater discharge is being eliminated and the wastewater flow is directed to a wastewater treatment plant in a neighboring municipality (\$2,000,000 for the first discharge eliminated, and \$1,000,000 for each additional discharge eliminated); (b) phosphorus reduction projects (\$1,000,000 for projects achieving final limits or \$500,000 for projects achieving interim limits); or (c) certain energy efficiency projects (\$50,000). Total regular plus priority principal forgiveness cannot exceed 70% of total project costs.

In addition, DNR and DOA awarded principal forgiveness funds in 2015-16 through 2017-18 for municipalities to develop fiscal sustainability plans. The plans help municipalities inventory and manage the assets that are part of the treatment works, implement water and energy conservation efforts, and plan for maintaining the wastewater treatment system. This allocation of principal forgiveness was eliminated in 2018-19.

Loan Repayments Held In Perpetuity. One of the primary federal requirements the states must meet is to manage the direct revolving loan program so that the amount received in federal capitalization grants is available "in perpetuity" (for an indefinite period with no stated limit). This is accomplished through the requirement that all repayments of loans made from federal grants plus the state match be credited to the revolving fund for future loans.

Federal regulations authorize the state to use up to half of the interest repayments received for loans that were originally provided from the proceeds of general obligation bonds issued to provide the 20% state match to federal capitalization grants for general obligation bond debt service. State legislation has authorized the use of \$153.8 million in segregated loan repayments through 2017-18 to be used instead of general purpose

revenues for general obligation bond debt service. In 2018-19, an additional \$8 million is appropriated for general obligation bond debt service.

As loans are repaid, typically on a 20-year cycle, the funds become available for new loans. Funding available in a fiscal year for new loans is equal to the receipt of new federal grants and state match plus loan repayments, less program administration costs.

Disbursements. Through June 30, 2018, the direct loan program had disbursed \$4.11 billion to 404 municipalities. Generally, funding commitments are disbursed over several years. Interest rates have ranged from 0.0% to 5.8%, and the weighted average interest rate for all loans is 2.66%.

Proprietary Loans

The clean water fund provides loans to municipalities through a proprietary loan portfolio. This method of financial assistance makes direct use of general obligation bond proceeds and is used when a project does not meet all the construction or financial criteria of the federal direct loan program and when the municipality is identified as otherwise eligible for assistance. It also funded the grant component of the prior hardship program (see the following section).

As of June 30, 2018, the program had loans outstanding for 30 projects with an aggregate principal balance of \$14,901,000. The \$496,700 average balance of the project loans is smaller than the \$2,931,900 average balance of direct revolving loans.

Hardship Financial Assistance

The financial hardship assistance subprogram was included in the original clean water fund program to provide additional state subsidy in municipalities with low income and high annual wastewater charges for residential users. Under

2017 Act 59, this component of the program was eliminated for financial assistance provided as of the 2017-19 biennium. Act 59 authorized municipalities to retain eligibility for hardship assistance if they: (a) submitted a completed application by June 30, 2018, including complete plans and specifications; and (b) met all other income and user charge criteria of the former program. As of June 30, 2018, DNR was processing two applications under this provision (Bluffview Sanitary District in Sauk County and Three Lakes Sanitary District in Oneida County).

The program provided financial hardship assistance that reduced residential user charges to an amount as close to 2% of the median household income in the municipality as possible. The median household income of the municipality was required to be 80% or less of the median household income of the state. The maximum financial assistance provided to a municipality, including hardship assistance, was a 70% grant with the remaining 30% of costs provided through a 0% interest rate loan. The municipality was required to pay at least 30% of the eligible costs of the project.

Through June 30, 2018, the clean water fund program had entered into financial hardship assistance agreements with 95 municipalities totaling \$196,095,300. This included hardship grants totaling \$129,165,600 (including disbursements of \$118,101,600) and hardship loans totaling \$66,929,700 (including disbursements of \$65,911,700). These municipalities are noted in Appendix IV.

Small Loan Program

The small loan subprogram provides an alternate funding source with a simplified application and review process for smaller municipal wastewater treatment projects. The maximum project cost is \$2,000,000. The program funds projects: (a) to maintain compliance with current wastewater standards, such as the addition of equipment not involving major construction; and

(b) to comply with a new or changed effluent limit. It has provided interest subsidies since June, 1995.

The small loan program utilizes an existing program operated by the Board of Commissioners of Public Lands (BCPL). The Board manages revenues and assets of the state school trust funds. Trust fund revenues are derived from timber sales on Board land holdings, fines, forfeitures, escheated property and other sources. The majority of the Board's funds are invested in loans granted to school districts and municipalities.

Under the small loan program, a municipality obtains a BCPL loan to fund a wastewater treatment project. The municipality also enters into an agreement with the clean water fund program to provide an annual subsidy of the BCPL loan interest rate. The clean water fund program makes payments from the clean water fund to the municipality for the interest rate subsidy. Units of government that are eligible for the clean water fund small loan program include: sewerage and sanitary districts; towns; villages; cities; counties; and public inland lake protection and rehabilitation districts. Assistance provided under the small loan program may not exceed the amount of subsidy that would have been provided if the loan would have been made directly by the clean water fund program.

Through June 30, 2018, the small loan program had provided interest subsidy of \$4,258,600 on 91 loans that have a total loan amount of \$29,701,500. Subsidized interest rates provided by the small loan program have ranged from 0.25% to 4.5%, which reduced BCPL interest rates that ranged from 3.00% to 6.75%.

Clean Water Fund Program Costs

The clean water fund program provides state financial assistance to municipalities with the use of state general obligation bonds and state revenue bonds. General obligation bonds are repaid from the state's general fund taxes and loan repayments on clean water fund loans. Clean water fund revenue bonds are primarily repaid from the proceeds of municipal loan repayments rather than from state tax dollars.

The cost to the state under the clean water fund program accrues over time based on the debt service costs of the general obligation bonds. The debt service costs fund: (a) the costs of subsidizing interest rates; (b) the state match required for the receipt of federal grants (prior to 2015-16); (c) direct (proprietary) state loans; (d) grants provided under the financial hardship program; and (e) program costs, including bond discounts, cost of bond issuance, some administrative expenses and capitalized interest.

DNR and DOA are required to attempt to ensure that increases in state water pollution general obligation debt service costs do not exceed 4% annually and that state general obligation bond debt service costs for all state water pollution abatement programs are not greater than 50% of all general obligation debt service in any fiscal year. Water pollution abatement debt service is expected to be approximately 4.3% (\$42.0 million) of total statewide general obligation debt service in 2018-19 of \$977.1 million, which includes GPR debt service of approximately \$572.7 million. Water pollution abatement debt service includes debt service costs for the clean water fund, for the predecessor programs to the clean water fund program, and for nonpoint source water pollution abatement debt service for DNR and the Department of Agriculture, Trade and Consumer Protection (DATCP).

The total cumulative amount of debt service payments for clean water fund program general obligation bonds is shown in Table 6. Total debt service expenditures for clean water fund program general obligation bonds were lower in several years primarily because of the deferral of most principal payments in the state's overall general obligation program. Clean water fund general obligation debt service is estimated at \$17.9 million in 2018-19. As shown in Table 6, a portion of general obligation bond debt service is paid by repayments of loans originally financed by general obligation bonds, instead of using GPR for that

Table 6: Clean Water Fund Payments of General Obligation Bond Debt Service

Year	Payment General Fund (GPR)	Payment from Loan Repayments	Total GO Debt Service Payment
1990-91	\$2,489,900		\$2,480,000
1990-91	6,536,600		\$2,489,900 6,536,600
1992-93	11,571,000		11,571,000
1992-93	15,213,000		15,213,000
1994-95		¢1 204 500	, ,
1774-73	16,074,400	\$1,394,500	17,468,900
1995-96	18,083,300	1,858,300	19,941,600
1996-97	19,288,200	2,350,600	21,638,800
1997-98	21,863,100	4,000,000	25,863,100
1998-99	26,423,700	4,000,000	30,423,700
1999-00	27,639,800	4,000,000	31,639,800
2000-01	28,690,600	4,000,000	32,690,600
2001-02	23,698,300	10,200,000	33,898,300
2002-03	30,196,000	6,000,000	36,196,000
2003-04 *	14,868,100	6,000,000	20,868,100
2004-05 *	15,977,200	6,000,000	21,977,200
2005-06	36,248,800	6,000,000	42,248,800
2005-00	39,951,200	6,000,000	45,951,200
2007-08	39,780,200	6,000,000	45,780,200
2007-08	41,810,100	6,000,000	47,810,100
2009-10 *	14,815,000	15,000,000	29,815,000
2009-10	14,815,000	13,000,000	29,613,000
2010-11 *	28,509,300	9,000,000	37,509,300
2011-12 *	12,540,300	8,000,000	20,540,300
2012-13	34,302,000	8,000,000	42,302,000
2013-14	32,347,800	8,000,000	40,347,800
2014-15	29,729,100	8,000,000	37,729,100
2015-16 **	16,157,600	8,000,000	24,157,600
2016-17	12,938,400	8,000,000	20,938,400
2017-18	9,888,600	8,000,000	17,888,600
2017-10		8,000,000	17,893,500
2-2-2			- : , - : - ; - : 0
Total S	\$637,525,100	\$161,803,400	\$799,328,500

^{*} Expenditures in some years are lower than otherwise would have occurred because of the restructuring of certain clean water fund issues or deferral of most principal payments on the state's general obligation (GO) bond program.

^{**} Beginning in 2015-16, program restructuring resulted in reductions in use of GPR for debt service.

^{***} Budgeted.

portion of general obligation bond debt service.

Future and Current Costs

DNR and DOA are required to develop a biennial finance plan that includes estimates of costs for the program in the upcoming biennium. (See Appendix III for a description of the biennial finance plan process.) In the 2019-21 biennial finance plan, submitted in September, 2018, DNR and DOA projected program needs for the next four years (2019-20 to 2022-23), of an estimated \$1,381.9 million in 2018 dollars, based on the current scope of the program and current federal and state wastewater discharge requirements. Through the 2017-19 biennium, the program has been authorized \$2,526.7 million in revenue bond authority and \$646.3 million in general obligation bond authority to fund the state's portion of program costs. This includes the deletion of \$40.46 million in excess authority under 2017 Act 59 that is not expected to be needed during the 2017-19 biennium.

Through June 30, 2018, the clean water fund program signed financial assistance agreements with municipalities for 994 projects at a total value of \$4,610.0 million, including \$4,333.7 million in loans closed and \$276.3 million in awards for grants or principal forgiveness. Appendix IV shows these financial assistance agreements by municipality. Loans made under the land recycling loan program (discussed in a later section) are funded from repayments of loans under the clean water fund program, and are included in these totals and the totals in Appendix IV. Of the loans and grants awarded with signed financial assistance agreements, \$4,051.4 million in loans and \$260.7 million in awards for grants or principal forgiveness have been disbursed. Municipalities are responsible for repaying all of the loan disbursements. The clean water fund program has received loan repayments from municipalities totaling \$3,267.9 million as of June 30, 2018. Interest rates ranged from 0% to 5.8% as of 2018.

Sources and Uses of Funds

Sources of Funds

Table 7 lists the total sources (\$7.29 billion) and uses of clean water fund program funds as of June 30, 2018. The sources of program funds include revenue bonds (\$2.03 billion), federal grant proceeds (\$1.15 billion), general obligation bond proceeds (\$647 million), loan repayments (\$3.27 billion), investment income (\$203 million), and loan servicing fees (\$0.6 million). Uses of funds

Table 7: Clean Water Fund Program -- Sources and Uses of Funds through June 30, 2018 (\$ in Millions)

Amount

Revenue Bonds Federal Grant Proceeds 1989-2017	\$2,027.2 1,148.2
General Obligation Bond Proceeds and	,
CWF Subsidy Bonds	647.0
Loan Repayments	3,267.9
Investment Income	203.2
Loan Servicing Fee	0.6
Total Sources of Funds	\$7,294.1
Uses of Funds	
Uses – Financial Assistance Disbursements	
Loans from Revenue Bonds	\$1,566.9
Loans from Federal Grants	955.6
Loans from General Obligation Bonds	298.5
Loans from Loan Repayments	1,140.1
Loans from Investment Income	90.3
Hardship Grants and Principal Forgiveness	260.7
Subtotal	\$4,312.1
Uses - Other	
Revenue Bond Debt Service	\$1,860.8
General Obligation Bond Debt Service	153.8
Program, Administrative and Issuance Expense	103.5
Transfer to Safe Drinking Water Loan Program	23.6
Subtotal Subtotal	\$2,141.7
Commitments and Reserves	
Loan Credit and Subsidy Reserves	0.6
Financial Assistance Agreements Closed	0.0
but not Fully Disbursed	104.2
Financial Assistance Applications Approved	104.2
but not Closed	61.4
Subtotal	\$166.2
Total Funds Unapplied	\$674.1
Total Uses of Funds	\$7,294.1

include loan and grant disbursements of \$4.3 billion, revenue bond debt service payments of \$1.86 billion, \$154 million from loan repayments for payment of general obligation bond debt service (instead of using GPR for the debt service payments), \$104 million in program and administrative costs, and \$24 million in funds transferred to the safe drinking water loan program. In addition, commitments and reserves include \$0.6 million in loan credit and subsidy reserves, \$104 million in loans closed but not fully disbursed, \$61 million in loan applications approved but not closed, and \$674 million in unapplied funds (funds that have not yet been allocated to a project).

The lines in Table 7 for financial assistance disbursements include the portions of closed loans that have been disbursed to the municipal recipient of the financial assistance. The line for financial assistance agreements closed but not fully disbursed includes the portion of the financial assistance agreement that has not been disbursed to the municipality, but will be during the remainder of construction during the next few years. The line for financial assistance applications approved but not closed includes agreements that have been approved, and the financial assistance amount has been allocated to the project, but the terms of the financial assistance agreement have not been finalized and the agreement has not been closed.

SAFE DRINKING WATER LOAN PROGRAM

Project Eligibility and Priority

Under the federal Safe Drinking Water Act (SDWA) Amendments of 1996, EPA is authorized to award federal capitalization grants to states for drinking water projects and states are required to provide a 20% match in state funds to receive the federal grant. The state safe drinking water loan program provides assistance primarily to local governments (including cities, villages, towns, counties, town sanitary districts, public inland lake protection and rehabilitation districts and municipal water districts) for eligible projects to plan, design, construct or modify public water systems, if the projects will facilitate compliance with national primary drinking water regulations under the federal Safe Drinking Water Act or otherwise significantly further the health protection objectives of the Act. A "public water system" is defined as a system providing piped water to the public for human consumption if the water system has at least 15 service connections or regularly serves an average of at least 25 individuals for at least 60 days each year.

Eligible Projects

DNR and DOA are authorized to provide financial assistance to local governments for drinking water projects that have any of the following purposes:

a. Address SDWA health standards that have been exceeded or prevent future violations of rules related to contaminants with acute or chronic health effects:

- b. Replace aging infrastructure if necessary to maintain compliance or further the public health protection goals of the SDWA;
- c. Consolidate water systems that have technical, financial, or managerial difficulties;
- d. Purchase a portion of another public water system's capacity if it is the most cost effective solution:
- e. Restructure a public water system that is in noncompliance with the SDWA requirements or lacks the technical, managerial and financial capability to maintain the system if the assistance will ensure that the system will return to and maintain compliance with the SDWA; and
- f. Create a new community water system or expand an existing community water system that, upon completion, will address existing public health problems with serious risks caused by unsafe drinking water provided by individual wells or surface water sources. A "community water system" is defined as a public water system that serves at least 15 service connections used by year-round residents of the area served by the public water system or that regularly serves at least 25 year-round residents.

Under 2015 Act 55, eligibility for financial assistance was expanded to include private owners of a community water system for a municipality. The private owner must: (a) demonstrate that there is adequate security for the repayment of the financial assistance; and (b) comply with the provisions of the federal Safe Drinking Water Act, state statutes, and the rules and regulations promulgated

under the provisions that DNR specifies. Act 55 also prohibited DNR and DOA from awarding principal forgiveness to private owners of a community water system that serves a municipality. As of June 30, 2018, the program had not entered into any financial assistance agreements under this provision.

Ineligible Projects

The following types of projects are ineligible for assistance under the program:

- a. Construction or rehabilitation of dams;
- b. Water rights, except if the water rights are owned by a public water system that is being purchased through consolidation as part of a capacity development strategy;
- c. Reservoirs, except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the property where the treatment facility is located;
- d. Projects needed primarily for fire protection;
- e. Projects for systems that lack the adequate technical, managerial and financial capability, unless assistance will ensure compliance;
- f. Projects for systems determined to be significant noncompliers unless funding will ensure compliance with SDWA requirements;
- g. Projects primarily intended to serve future growth;
- h. Projects for systems owned by state or federal agencies; and
- i. Projects or portions of projects that are not reasonably necessary and appropriate to address a public health concern.

Other Eligible Activities

DNR is authorized to spend, with DOA approval, up to a total of 15% of the federal safe drinking water capitalization grant in any fiscal year for the following five activities authorized by the federal Safe Drinking Water Act, but not more than 10% of the federal capitalization grant for any one activity:

- a. Provide a loan to the owner (whether or not a local government) of a community water system or a nonprofit noncommunity water system to acquire land or a conservation easement from a willing seller or grantor to protect the source of the water system from contamination and to ensure compliance with national primary drinking water regulations. A "noncommunity water system" is defined as a public water system that is not a community water system.
- b. Provide a loan to the owner of a community water system to: (1) implement voluntary source water protection measures in order to facilitate compliance with national primary drinking water regulations or otherwise significantly further the health protection objectives of the Safe Drinking Water Act; or (2) to implement a program for source water quality protection partnerships.
- c. Assist the owner of a public water system to develop the technical, managerial and financial capacity to comply with national primary drinking water regulations (capacity development).
- d. Delineate or assess source water protection areas (only available with federal fiscal year 1997 grant monies).
- e. Protect wellhead areas from contamination.

DNR is authorized to spend, with DOA approval, up to a total of 10% of the federal capitalization grant in any fiscal year for the following four activities authorized by the federal Safe

Drinking Water Act: (a) administration of a public water system supervision program; (b) technical assistance concerning source water protection; (c) development and implementation of a capacity development strategy required by the Act; and (d) development and administration of an operator certification program required by the Act.

DNR is authorized to spend, with DOA approval, up to a total of 2% of the federal capitalization grant in any fiscal year for technical assistance to public water systems serving 10,000 or fewer persons.

Criteria Used to Prioritize Projects

Administrative rule NR 166 establishes a priority ranking system that scores each safe drinking water loan program project and is used to establish a list of projects to be funded. The ranking system includes the following priorities:

- a. First priority is provided for projects that address an acute public health risk, especially risk related to a confirmed waterborne disease outbreak or confirmed microbial contamination, such as from giardia or cryptosporidium.
- b. Second priority is provided for projects that address chronic and longer-term health risks to people who drink the water, especially risk related to organic chemical contamination.
 - c. Projects receive priority ranking points if

the community they serve has financial need on a per household basis, including a population less than 10,000 and a median household income equal to or less than 80% of the state median.

- d. Projects also receive priority if they correct secondary contaminant violations or system compliance needs.
- e. Projects also receive priority if they have implemented activities that demonstrate specific technical, financial and managerial capacity of the public water system, such as enacting an emergency action plan, private well abandonment ordinance or wellhead protection plan and ordinance.

Other Requirements

Any one municipality may not receive more than 25% of the funds that DOA projects will be available for the safe drinking water loan program for the biennium.

Financial Assistance Criteria

Types of Financial Assistance

DNR and DOA are authorized to use the following methods to provide financial assistance under the safe drinking water loan program:

a. Make loans with an interest rate of 55% of

Table 8: Safe Drinking Water Loan Program Loan Interest Rates by Project Type

Project Category	Percent of Market Rate	Rate 2015-17 *	Rate 2017-19 *
Financial need communities	33% of Market Rate	0.99%	1.122%
Regular eligibility	55% of Market Rate	1.65	1.870

^{*}DOA reviews the interest rate quarterly. For 2015-17, the market interest rate for April 1, 2016, through September 30, 2016, was 3.0%. For 2017-19, the market interest rate for April 1, 2018, through December 31, 2018, was 3.4%.

market interest rate for local governments that do not meet financial need criteria established in NR 166. Table 8 shows the program interest rates. The safe drinking water loan program uses the same market interest rate as the clean water fund program.

- b. Make loans with an interest rate of 33% of market interest rate for local governments that meet the following financial need criteria established in NR 166: (1) the population of the municipality is less than 10,000; and (2) the median household income of the municipality is 80% or less (\$42,454 in 2017-18 and \$42,952 in 2018-19) of the statewide median.
- c. Provide loans for a term not to exceed 20 years. (The federal Safe Drinking Water Act authorizes, but does not require, states to allow 30-year loan agreements for disadvantaged municipalities with EPA approval. Wisconsin statutes have not been amended to adopt that provision.)
- d. Purchase or refinance the debt obligation of a local government incurred after July 1, 1993, if the debt was incurred to finance costs of currently eligible projects.
- e. Guarantee or purchase insurance for obligations incurred to finance the cost of eligible projects if the guarantee or insurance will provide credit market access or reduce interest rates.
- f. Make payments to the Board of Commissioners of Public Lands to reduce principal or interest payments, or both, on loans made to local governments for projects that are eligible for financial assistance under the safe drinking water loan program. (DNR and DOA are not using the BCPL small loan program for safe drinking water loan projects.)
- g. Provide principal forgiveness for certain projects financed with federal funds received in fiscal year 2009 and subsequent years. Recent federal appropriations require states to use a minimum of 20% of the federal capitalization

grant for principal forgiveness. The Safe Drinking Water Act allows 30% of the grant to be used as principal forgiveness for disadvantaged communities. EPA has determined that these two calculations are additive, meaning up to 50% of the federal capitalization grant may be used for principal forgiveness. DNR and DOA established a maximum of \$500,000 in principal forgiveness per municipality. In 2012-13 through 2017-18, the allowable principal forgiveness ranged from 15% to 70% of project costs. Beginning in 2018-19, the allowable principal forgiveness ranges from 30% to 70% of project costs.

DNR and DOA are authorized to jointly request the Joint Committee on Finance to modify the loan interest rate as a percentage of the market interest rate. To date, the agencies have not requested any change in the interest rates.

Application Procedures

A local government is required to submit a notice of its intent to apply for financial assistance under the safe drinking water loan program at least eight months before the beginning of the fiscal year in which it intends to receive financial assistance. DNR may waive this requirement upon written request by the local government. An applicant must submit an engineering report prior to submitting an application for financial assistance. After DNR approves the local government's engineering report, the local government must submit an application for financial assistance under the program to DNR on or before the June 30 preceding the fiscal year in which the applicant is requesting to receive financial assistance. Applicants are limited to one application per project per year. Beginning with applications submitted by the June 30, 2018, deadline for financial assistance in 2018-19, municipalities are required to submit applications using the DNR online application system.

DNR approves applications for financial assistance after: (a) the project is ranked on the

priority list; (b) DNR determines that the project meets eligibility requirements; and (c) DOA determines that the project has pledged any required security, demonstrated the financial capacity to operate and maintain the project and demonstrated the ability to repay the loan.

Local governments must, as a condition of receiving financial assistance under the program: (a) establish a dedicated source of revenue to repay the financial assistance; (b) comply with applicable federal and state statutes and rules; (c) develop and adopt a program of water conservation as required by DNR; (d) develop and adopt a program of systemwide operation and maintenance of the public water system, including the training of personnel, as required by DNR; and (e) develop and adopt a user fee system.

If a loan is not closed before June 30 of the year following the year in which funding is allocated, DOA shall release the funding commitment allocated to the project.

Program Funding

Federal and State Funding

The safe drinking water loan program is authorized \$71.4 million in general obligation bond authority to provide the required 20% state match to federal grants. The program has received federal capitalization grants totaling \$398.3 million for federal fiscal years 1997 through 2018, received in state fiscal years 1997-98 through 2018-19. Table 9 shows the amounts of federal grant and

Table 9: Safe Drinking Water Loan Program Federal Grants and State Match

				l Funding			
			Grants and		Subtotal		
Fiscal Y		-	Principal	Administration	Federal	0 3.6 . 1	TD . 1
Federal	State	Loans	Forgiveness	and Set-Asides*	Funding	State Match	Total
1997/1998	1999	\$42,754,500		\$8,340,300	\$51,094,800	\$10,219,000	\$61,313,800
1999	2000	9,607,300		400,300	10,007,600	2,001,500	12,009,100
2000	2001	8,736,700		1,664,100	10,400,800	2,080,200	12,481,000
2001	2002	8,772,800		1,671,000	10,443,800	2,088,800	12,532,600
2002	2003	13,067,100		2,879,400	15,946,500	3,189,300	19,135,800
2003	2004	12,994,900		2,855,800	15,850,700	3,170,100	19,020,800
2004	2005	13,382,000		3,060,800	16,442,800	3,288,600	19,731,400
2005	2006	13,731,900		2,676,000	16,407,900	3,281,600	19,689,500
2006	2007	14,716,100		1,215,200	15,931,300	3,186,300	19,117,600
2007*	2008	16,970,800		-1,039,800	15,931,000	3,186,200	19,117,200
2008	2009	14,335,600		1,434,400	15,770,000	3,154,000	18,924,000
2009	2010	12,962,100	\$37,750,000	2,807,900	53,520,000	3,154,000	56,674,000
2010*	2011	0	21,245,400	2,153,600	23,399,000	4,679,800	28,078,800
2011*	2012	3,187,600	13,105,200	2,140,800	18,433,600	3,686,700	22,120,400
2012	2013	9,181,200	4,642,200	1,857,500	15,680,900	3,136,200	18,817,100
2013	2014	8,304,200	4,355,400	1,858,400	14,518,000	2,903,600	17,421,600
2014	2015	7,436,700	4,627,500	3,360,800	15,425,000	3,085,000	18,510,000
2015	2016	6,348,500	4,596,900	4,377,600	15,323,000	3,064,600	18,387,600
2016	2017	2,924,200	7,248,000	4,323,800	14,496,000	2,899,200	17,395,200
2017	2018	4,495,800	5,000,000	4,876,200	14,372,000	2,874,400	17,246,400
2018	2019	10,044,500	3,786,200	5,100,300	18,931,000	3,786,200	22,717,200
Total		\$233,954,500	\$106,356,800	\$58,014,400	\$398,325,700	\$72,115,300	\$470,441,000

^{*}The actual amounts changed in subsequent years. The administration number is negative in FFY 2007 because amounts were transferred from administration and set-asides to be used for loans. The amounts were adjusted in FFY 2010 and 2011 to reallocate funds that were not used for loans and administration in those years to be used for principal forgiveness for lead service line replacement in FFY 2016 and 2017.

state match by fiscal year.

DNR and DOA are required to develop a biennial finance plan that includes estimates of costs for the program in the upcoming biennium. The 2019-21 biennial finance plan, submitted in September, 2018, estimated that \$7.1 million in additional general obligation bond authority would be needed in 2019-21 to match the estimated amount of federal funds to be awarded to Wisconsin for the safe drinking water loan program.

The Governor is authorized to transfer up to 33% of the federal capitalization grant received for the safe drinking water loan program to the clean water fund program, or to transfer an amount equal to up to 33% of the federal capitalization grant received for the safe drinking water loan program from the clean water fund program to the safe drinking water loan program. This would allow the state to transfer up to \$112.7 million, representing 33% of the \$341.6 million in federal safe drinking water capitalization grants for federal fiscal years 1997 through 2017 (excluding ARRA funds received). As of June 30, 2018, DOA and DNR transferred \$23,596,100 from clean water fund direct loan repayments to the safe drinking water loan program. No transfers have been made since 2005. A remaining balance of \$89,146,700 could be transferred from the clean water fund program to the safe drinking water loan program.

Funds transferred from the clean water fund were first used to refinance projects on the current safe drinking water loan program funding list. Federal regulations generally require that capitalization grant funds loaned for refinanced projects must be disbursed over eight calendar quarters, or two years (the "eight quarters rule"). Funds transferred from the clean water fund were disbursed to accommodate project funding needs during the time that federal capitalization grants were not available under the eight quarters rule. Without the transferred funds, safe drinking water loans for refinanced projects would have had to be disbursed over several calendar quarters, with a separate

loan closing required for each quarter.

Present Value Subsidy

Prior to 2015-17, the statutes included a present value subsidy limit to provide a financial control mechanism similar to what was used for the clean water fund. Under 2015 Act 55, the use of present value subsidy was eliminated. Effective with 2015 Act 55, the program allocates "financial assistance" instead of "subsidy" to projects.

Principal Forgiveness for Lead Service Line Replacement

In 2016-17 and 2017-18, DNR and DOA established a one-time, two-year program to provide principal forgiveness to municipalities to remove lead in private water service lines.

Lead is a metal which, prior to the 1940s, and continuing into the 1980s in some areas, was often used in the construction of drinking water pipes and plumbing fixtures in homes, schools, and other buildings. EPA indicates that exposure to high levels of lead can cause damage to a person's brain, red blood cells, kidneys, childhood intelligence levels, and classroom performance. According to the EPA, children younger than six are most at risk of damage due to their rapid rate of growth.

Many older cities and villages in Wisconsin have water service lines made of lead or containing lead. Water service lines, also known as laterals, connect a building to the water mains in the street, and carry drinking water from the public water system to the individual building. In general, the portion of the lateral that extends from the water main to the curb stop is the responsibility of the public water system, and the remaining portion of the lateral that extends from the curb stop to the building is the responsibility of the property owner.

Safe drinking water loans to local governments are for projects owned by the municipality for the 20-year life of the loan. In general, the state safe drinking water loans had not been used for projects on private property because of state concerns about using general obligation bonding proceeds, which provide the state match for the federal grant, for projects that benefit private property owners rather than improve publicly-owned infrastructure or provide a direct public benefit.

In 2016-17 and 2017-18, DNR allocated part of the federal safe drinking water capitalization grant to provide funding for principal forgiveness for lead service line replacement on private property. Part of the amount used for this program included funding from the federal fiscal year 2016 capitalization grant. In addition, EPA authorized DNR to reopen the federal fiscal year 2010 and 2011 federal grants to reallocate authority that could have originally been allocated for principal forgiveness, but was not, to be used for lead service line replacement principal forgiveness in 2016-17 and 2017-18. These earlier federal grants were originally allocated for loans or administration, and were subsequently reallocated to principal forgiveness. This did not change any previous loans.

DNR and DOA allocated principal forgiveness for private lead service line replacement according to a formula that in 2016-17 awarded funds to municipalities based on population size. In 2017-18, DNR and DOA allocated principal forgiveness for lead service line replacement based on the municipality's median household income as a percent of the statewide median, and number of lead service lines. The agencies distributed principal forgiveness funds as a reimbursement for costs specific to lead service line replacement on private property. The program funded private lead service line replacement costs only if the public portion of the water service line is not lead, i.e. where public lead water mains or service lines have been replaced in the past or are replaced at the same time the private lead service lines are replaced under the program. Municipalities could enter into safe drinking water loans for the public portion of lead service line replacement projects.

As of June 30, 2018, the program entered into 64 financial assistance agreements with 42 municipalities totaling \$26,857,885 in principal forgiveness for private lead service line replacement. Several of the municipalities received funding in both years of the program. These projects are included in the projects listed in Appendix V.

Program Costs

Intended Use Plan

Intended use plans were submitted to EPA by DNR and DOA every year between 1998 and 2018. The plans describe funds available for the year and the intended uses of the funds. The federal program allows for several set-asides of funds for administration, source water protection, well-head protection, technical assistance, state management of public water supply systems and other drinking water activities. Table 10 shows the set-aside amounts from safe drinking water loan program funds. In addition, the agencies have "banked," or not requested, administrative set-asides of \$12.6 million, which they can use in the future for the purposes under Table 10.

Table 10: Safe Drinking Water Loan Program --Administrative Set-Aside Allocations Through June 30, 2018

Set-Aside Category	Allocated Amount	
a. Administration	\$12,048,763	
b. Source Water Protection	3,737,926	
c. Wellhead Protection	4,263,307	
d. Technical Assistance - Small Systems	6,002,732	
e. Local Assistance - Capacity Developme	ent 8,247,432	
f. State Program Management (Administration		
of Public Water Supply Systems, Capaci	ity	
Development, and Operator Certification	n) <u>19,778,447</u>	
Total	\$54,078,607	

During the 2017-19 biennium, these set-aside amounts are being used as follows:

- a. The set-aside for administration represents less than the maximum 4% of the FFY 1997 through 2018 federal grants that may be used for administration by DNR and DOA.
- b. The set-aside shown in Table 10 for source water protection represents the maximum 10% of the FFY 1997 federal grant that may be allocated to this use. (Subsequent federal grants may not be used for this purpose.)
- Wellhead protection funds are being used to: (1) work with the Center for Watershed Science and Education (a collaboration of the UW-Stevens Point College of Natural Resources and the UW-Extension) and Wisconsin Geological and Natural History Survey to sponsor two workshops to train teachers on the use of a groundwater sand tank model and promote source water protection; (2) fund one wellhead protection study project by the University of Wisconsin - Madison (evaluate naturally occurring radium in the Cambrian-Ordovician aquifer in the state, and develop recommendations for well construction and operation to reduce levels of radium in water supplies); (3) continue activities related to data management, mapping, and computer programming to track contaminant sources, public wells, other high-capacity wells, well construction reports, and groundwater quality, for use by DNR staff; and (4) implement an incentivized watershed intervention approach to protecting drinking water systems in priority geographic areas, which is to evaluate the potential for changing practices of point and nonpoint contributors of nitrogen to groundwater in order to avoid the need for installation of water treatment equipment.
- d. DNR is using the 2% technical assistance funds to contract with the Wisconsin Rural Water Association to: (1) conduct at least 600 site visits annually to other-than-municipal (OTM) and non-transient non-community (NTNC) water system operators to address regulatory topics, monitoring

and sampling of the water system, water system operation and maintenance, public notice and notification requirements, sanitary survey preparation, deficiency correction, water system trouble-shooting, violation follow-up and correction, water treatment, and water quality problem correction; and (2) deliver monitoring reminders to all the OTM and NTNC water systems in the state quarterly (approximately 5,780 contacts annually) with information about monitoring and reporting deadlines, needs to correct violations, and compliance assistance.

A NTNC means a non-community water system which regularly serves at least 25 of the same persons over six months per year. Examples of non-transient non-community water systems include those serving schools, day care centers, and factories. A community water system means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

- Local assistance capacity development funds are being used to contract with county and local health agencies for inspection of transient non-community (TNC) systems, including to: (1) conduct annual site visits; (2) collect drinking water quality samples; and (3) conduct inspections of the system at least once every five years. In 2018, DNR contracted for services covering 52 counties and approximately 6,800 TNC systems (out of approximately 9,500 such systems), and in 2019, DNR plans to continue the program at the same level. TNC systems typically include commercial establishments, restaurants, small motels, campgrounds, and churches that serve more than 25 persons per day at least 60 days out of the year, which are not required to have certified system operators.
- f. State program management funds are being used for: (1) activities related to administration, coordination and policy development; (2) engineer and water supply specialist staff to conduct activities related to community, OTM, NTNC, and

TNC systems, such as performing sanitary surveys, plan reviews, inspections, enforcement, monitoring of submission of samples and reports from the systems, training of water system operators, and review of water system capacity evaluations; (3) computer programming and equipment; (4) administration of the water system operator certification program, including initial and renewal certification of operators, coordination of training and fulfillment of continuing education requirements with external groups and operators, and fee and database management; (5) a contract with the Wisconsin State Laboratory of Hygiene to develop a protocol to assess for coliform bacteria, develop a protocol to measure small amounts of E. coli bacteria, and coordinate monitoring data exchange between the Laboratory and DNR; (6) support of courses at the Moraine Park Technical College for operators of municipal waterworks; and (7) provision of continuing education and exam preparation courses for operators of small water systems.

Financial Assistance Agreements

DNR and DOA are required to establish a funding list in each fiscal year that ranks approvable loan applications in the same order that they appear on the priority list. If available funds are not sufficient to fund all approved applications, DOA is required to allocate funding to projects in the order that they appear on the funding list, except that: (a) 15% of the available funds in each fiscal year would be reserved for projects for public water systems that regularly serve fewer than 10,000 persons; and (b) no local government could receive more than 25% of the funds that DOA projects will be available for the safe drinking water loan program for the biennium.

The safe drinking water loan program entered into 412 financial assistance agreements totaling \$708.0 million through June 30, 2018, including \$606.5 million in loans, and \$101.5 million in grants and principal forgiveness. Of this total, \$546.3 million in loans and \$76.3 million in grants have been disbursed. Municipal loan recipients are

responsible for repaying the loans. As of June 30, 2018, the safe drinking water loan program has received \$317.5 million in loan repayments.

Table 11 shows the amounts of the financial assistance agreements by fiscal year from 1998-99 (the first year of financial assistance agreements under the program) through 2017-18. Appendix V shows these financial assistance agreements by municipality.

The City of Milwaukee, the largest recipient of safe drinking water loans, accounted for \$80.1 million (11.3%) of the \$708.0 million in financial assistance agreements as of June 30, 2018. Five other municipalities each received more than \$25 million in financial assistance agreements, including: (a) City of Oshkosh, \$37.1 million; (b) City of Fond du Lac, \$33.2 million; (c) City of Racine, \$33.1 million; (d) City of Neenah, \$26.4 million; and (e) City of Marinette, \$26.2 million. Together,

Table 11: Safe Drinking Water Loan Program, Financial Assistance Agreements by Fiscal Year

State Fiscal Year	Loan	Grant and Principal Forgiveness	Total
1998-99	\$52,973,432		\$52,973,432
1999-00	9,523,140		9,523,140
2000-01	10,301,107		10,301,107
2001-02	8,951,219		8,951,219
2002-03	11,049,005		11,049,005
2003-04	32,811,206		32,811,206
2004-05	41,761,265		41,761,265
2005-06	28,238,400		28,238,400
2006-07	14,822,436		14,822,436
2007-08	47,715,697		47,715,697
2008-09	25,509,966		25,509,966
2009-10	45,937,126	\$37,750,000	83,687,126
2010-11	3,319,859	1,663,557	4,983,416
2011-12	31,623,618	5,851,644	37,475,262
2012-13	37,514,929	8,080,975	45,595,904
2013-14	29,576,358	3,846,666	33,423,024
2014-15	57,127,222	5,821,763	62,948,985
2015-16	21,737,157	3,707,366	25,444,523
2016-17	52,979,801	17,518,579	70,498,380
2017-18	43,021,479	17,305,459	60,326,938
Total	\$606,494,422	\$101,546,009	\$708,040,431

Table 12: Safe Drinking Water Loan Program Sources and Uses of Funds Through June 30, 2018 (\$ in Millions)

	Amount
Sources of Funds	
Federal Capitalization	
Grants - FFY 1997 thru FFY 2017	\$379.4
20% State Match from General Obligation Bonds	67.0
Loan Repayments	317.5
Investment Income	14.9
Transfer from Clean Water Fund Program	23.6
Total Sources of Funds	\$802.4
Uses of Funds	
Uses – Financial Assistance Disbursements	
Loans from Federal Grants	\$249.0
Loans from General Obligation Bonds	67.0
Loans from Loan Repayments	222.3
Loans from Investment Income	8.0
Grants and Principal Forgiveness	76.3
Subtotal	\$622.6
Uses – Other	
Administrative, Set-Aside and	
Issuance Expense	\$47.5
Commitments:	
Financial Assistance Agreements	
Closed but not Fully Disbursed	64.6
Subtotal	\$64.6
Unapplied Funds	67.7
Total Uses of Funds	\$802.4

the five municipalities received 22.0% of the \$708.0 million in financial assistance agreements as of June 30, 2018.

Sources and Uses of Funds

Table 12 lists the total sources (\$802.4 million) and uses of safe drinking water loan program funds as of June 30, 2018. The sources of program funds include federal grant proceeds (\$379.4 million), general obligation bond proceeds (\$67 million), funds transferred from the clean water fund program (\$23.6 million), loan repayments (\$317.5 million) and investment income (\$14.9 million). Uses of funds include \$546.3 million in loan disbursements, \$76.3 million in grant disbursements and principal forgiveness, \$47.5 million in administration and set-asides, \$64.6 million in financial assistance commitments, and \$67.7 million in unexpended funds available for

Table 13: Safe Drinking Water Loan Program Payments of General Obligation Bond Debt Service

Service		
		Payment from
	Year	General Fund (GPR)
	1998-99	\$140,500
	1999-00	948,700
	2000-01	1,133,200
	2001-02	1,139,700
	2002-03	1,231,100
	2003-04 *	666,000
	2004-05	1,489,600
	2005-06	1,989,700
	2006-07	2,318,700
	2007-08	2,539,400
	2008-09	2,664,600
	2009-10 *	1,401,100
	2010-11 *	1,656,100
	2011-12 *	1,560,200
	2012-13	4,446,000
	2013-14	5,139,700
	2014-15	4,354,200
	2015-16	4,746,400
	2016-17	5,282,800
	2017-18	5,095,400
	2018-19 **	5,588,900
	Total	\$55,532,000

^{*} Expenditures in some years are lower than otherwise would have occurred because of the restructuring of certain safe drinking water fund issues or deferral of most principal payments on the state's general obligation (GO) bond program.

commitment to financial assistance agreements or administrative expenses in 2018-19 and subsequent years.

Debt Service Costs

The cost to the state under the safe drinking water loan program accrues over time based on the debt service costs of the general obligation bonds. The debt service costs fund the state match required for the receipt of federal grants. Safe drinking water loan program general obligation debt service is estimated at \$5.6 million in 2018-19. The total cumulative amount of annual debt service payments for safe drinking water loan program general obligation bonds is shown in Table 13.

^{**} Budgeted.

LAND RECYCLING LOAN PROGRAM

In 1997 Act 27, the land recycling loan program (LRLP) was created within the clean water fund program to provide financial assistance to local governments (including cities, villages, towns, counties, redevelopment authorities or housing authorities) for the investigation and remediation of contamination at sites or facilities owned by the local government if the contamination has affected, or threatens to affect, groundwater or surface water.

The program has not made loans since 2008. The program is summarized in this chapter because the statutes still authorize up to \$299,657 for potential loans, and the program continues to collect repayments from prior loans. Further, an outstanding balance remains due from a loan to the dry cleaner environmental response program.

Program Requirements

The land recycling loan program was authorized funds of up to \$20 million, which came from reallocation of repayments from local governments of clean water fund program loans made with the proceeds of federal grants to the clean water fund program. If not used for the land recycling loan program, funds would have been used for clean water fund loans to upgrade or replace wastewater treatment plants to meet state and federal requirements.

The program provided the highest priority to a site which had impacted one or more public water supply wells or private drinking water supply wells above maximum contaminant levels in DNR administrative rules.

DNR and DOA are authorized to use the following methods to provide financial assistance under the land recycling loan program: (a) make loans with an interest rate of 0%; (b) purchase or refinance certain debt obligations of a local government, if the debt was incurred to finance the cost of an eligible project; and (c) guarantee or purchase insurance for certain obligations incurred to finance the cost of eligible projects.

Local governments are required to, as a condition of receiving financial assistance under the program: (a) establish a dedicated source of revenue to repay the financial assistance; (b) comply with applicable federal and state statutes and rules; and (c) allow DNR access to the property to make inspections. A local government must sell a site or facility remediated under the program for not less than fair market value if the loan is outstanding. A local government that sells a site or facility remediated under the program must apply the sales proceeds first toward any state land recycling loan balance, then toward the cost of the land plus the cost of remediation, third toward any state subsidy and finally any remaining funds are retained by the municipality. Any sale proceeds remaining after the subsidy is fully paid belong entirely to the municipality.

LRLP Loan to Dry Cleaner Program

Under 2009 Wisconsin Act 28, DOA and DNR were authorized to transfer up to \$6.2 million from the LRLP to the dry cleaner environmental response program (DERP) administered by DNR. The DERP provides reimbursement to owners for a portion of the costs of cleaning up discharges of

dry cleaning solvents. (For more information about the dry cleaner environmental response program, see the Legislative Fiscal Bureau's informational paper entitled, "Contaminated Land Cleanup Programs.")

DNR and DOA entered into a memorandum of understanding and transferred the maximum amount of \$6.2 million from the LRLP to the segregated dry cleaner environmental response fund (DERF) between 2009-10 and 2013-14. DOA assesses interest on the transferred funds at a rate no less than 0% and no greater than the EIF market interest rate. As of July, 2018, the interest rate on the transferred funds was 1.88%, based on the rate earned for state investment fund earnings. Under the term of the loan, as approved by EPA, a loan repayment is required from the DERF to the EIF of at least \$1,000 per year. The entire loan must be repaid, and cannot be forgiven. As of June 30, 2018, \$167,000 in interest cost has been accrued

and \$9,000 in principal and \$5,900 in interest has been repaid, for a total of \$6,352,100 owed by the DERF to the EIF.

Financial Assistance Agreements

The land recycling loan program entered into financial assistance agreements totaling \$15,218,891 with nine municipalities. The last agreement was entered into in 2008. These loans are included in the Appendix IV list of clean water fund financial assistance agreements. Actual disbursements were \$13,500,343. In addition, \$6.2 million was transferred to the dry cleaner environmental response program.

The remaining unallocated LRLP funds total \$299,657. While statutes continue to authorize use of these funds for financial assistance under the program, DNR and DOA have not found an eligible applicant for these funds since 2008.

ENVIRONMENTAL IMPROVEMENT FUND ADMINISTRATION

Agency Responsibilities and Funding

Funding for administration of the three programs within the environmental improvement fund (EIF) is provided from segregated revenues generated from the repayment of clean water fund loans, safe drinking water loans and land recycling loans, interest earned on bond proceeds, and federal administrative grants. Base-level appropriations for administration of the environmental improvement fund total \$7.3 million and 58.4 positions for 2018-19.

Department of Natural Resources

DNR is authorized \$6,485,200 and 53.0 positions in 2018-19 for administration of the environmental improvement fund programs. This includes: (a) \$1,683,800 environmental improvement fund (EIF) SEG with 15.0 positions; (b) \$2,127,400 clean water fund FED with 21.0 positions; and (c) \$2,674,000 safe drinking water loan program FED with 17.0 positions. The source of EIF revenues is interest income from the loan portfolio balance from certain clean water fund loans for municipal wastewater treatment facilities and proceeds from certain past general obligation bonds issued to pay state subsidy on loans to municipalities.

The Department manages all aspects of the environmental improvement fund program not specifically assigned to DOA. DNR's specific duties include the following:

1. Calculate project priority values.

- 2. Take the lead state role in relations with EPA, including agreements necessary to receive a capitalization grant for the clean water fund program and the safe drinking water loan program.
- 3. Cooperate with DOA in administration of the environmental improvement fund program.
- 4. Take the lead state role with municipalities in providing environmental improvement fund information, and cooperate with DOA in providing such information.
- 5. Periodically inspect project construction under the environmental improvement fund to determine project compliance with construction plans and specifications approved by DNR.
- 6. Submit a biennial budget request for the environmental improvement fund program.
- 7. Establish eligibility requirements and determine eligibility for financial assistance.
- 8. Make commitments of financial assistance subject to a certification by DOA that the municipality has demonstrated that it is financially able to repay the loan, and that the assistance meets any terms and conditions established by DOA relating to financial management.
- 9. Approve applications, facility plans, and construction plans and specifications.
 - 10. Determine annual funding policies.
- 11. Prepare a biennial list of the estimated need for wastewater, drinking water and land recycling projects.

Under 2017 Act 59, the use of the DNR environmental improvement fund SEG administrative appropriations was expanded to include wastewater permitting activities under s. 283.31 of the statutes. In addition, Act 59 converted funding for 2.0 positions that work on wastewater permitting activities for concentrated animal feeding operations (CAFO) from GPR (general purpose revenues) to EIF SEG. In 2018-19, DNR allocated \$174,800 EIF SEG with 2.0 SEG positions for CAFO permitting.

Department of Administration

DOA is authorized \$828,000 EIF SEG with 5.4 positions in 2018-19 to provide financial management of the environmental improvement fund program. DOA responsibilities include the following:

- 1. Manage and implement certain financial aspects of the environmental improvement fund program.
- 2. Cooperate with DNR in administering the program.
- 3. Manage environmental improvement funds with Building Commission authorization, issue environmental improvement fund revenue bonds and distribute the proceeds of the environmental improvement fund revenue obligations.
- 4. Establish terms and conditions of financial assistance, including the type of municipal obligation required for repayment. Before DNR and DOA can sign a financial assistance agreement with a municipality, DOA is responsible for certifying that the municipality demonstrated that it has the financial capacity to: (a) pay the debt service on its obligations; (b) meet operation and maintenance costs of the project for its useful life; and (c) meet the terms and conditions established.
- 5. Disburse loans and collect municipal payments.

- 6. Direct the investments of the environmental improvement fund.
- 7. If necessary, audit or contract for audits of projects receiving financial assistance under the program.

Joint Responsibilities

Joint responsibilities of DNR and DOA include the following:

- 1. Prepare a biennial finance plan.
- 2. Charge and collect service fees.
- 3. Determine conditions of financial assistance.
- 4. Establish the loan payment and repayment schedule.
- 5. Enter into a financial assistance agreement with a municipality.
- 6. Submit the required reports to the Legislature and Building Commission on program implementation.

Loan Service Fees

Statutes authorize DNR and DOA to establish administrative rules to charge and collect administrative service fees from loan recipients to recover the costs of administering the clean water fund program and safe drinking water loan program.

Administrative rule NR 162.21 authorizes DNR and DOA to establish administrative service fees for clean water fund loans in the biennial finance plan. Under the biennial finance plan for 2017-19, the program established, for the first time, a loan service fee for clean water fund loans, equaling 0.25% of the outstanding balance on clean water fund loans that have an interest rate of greater than 0%, effective with loans entered into

during the 2017-19 biennium. The loan service fee is included in the interest rate charged on clean water fund program loans, and does not increase the interest rate paid by municipal borrowers. The program collected \$26,700 in loan service fees as of June 30, 2018.

Under 2015 Act 55, statutory authorization for administrative service fees was expanded to include safe drinking water loans. As of the fall of 2018, the safe drinking water loan program has not established administrative service fees. DNR has begun the administrative rule process to authorize the collection of loan service fees for the safe drinking water loan program.

DNR and DOA are required to jointly charge and collect an annual service fee for reviewing and acting upon land recycling loan program applications and servicing the financial assistance agreements. The original program statutes established the fee for 1997-99 as 0.5% of the loan balance. DNR and DOA are required to establish the fee for subsequent biennia in the biennial finance plan for the environmental improvement program, at a rate designed to cover the costs of reviewing and acting upon land recycling loan program applications and servicing financial assistance agreements. DNR and DOA have not made any changes in the service fee from the original rate. As of June 30, 2018, DNR and DOA have collected service fees totaling \$644,200. This included \$22,131 in 2016-17 and \$18,847 in 2017-18.

Bonding Provisions

The environmental improvement fund program contains several provisions related to the issuance of bonds, including private versus public sale of bonds, requirements for minority underwriter participation and the moral obligation requirement that can be attached to a clean water fund loan.

Private Versus Public Sale

General obligation bonds may be sold at a "private" sale to the clean water fund or safe drinking water loan program. Other sales must be "public." A public sale means that the state takes bids for the bonds from all interested underwriters and awards the sale to the lowest bidder. A private sale means that the state may make the sale to an underwriter based on a negotiated price. The award does not have to be made to the lowest bidder and the state may choose to deal with only one firm. Negotiated, or "private," sales are generally made in cases where, due to the complexity of the bond issue, there are few underwriters with the necessary expertise to fulfill the state's needs. Under current law, environmental improvement fund revenue bonds can be sold at private or at public, competitive sale. The safe drinking water loan program does not sell revenue bonds.

Minority Underwriters

The statutes require that at least 6% of revenue and general obligation bonds and operating notes be underwritten by minority investment firms. In addition, the statutes establish a requirement that at least 6% of the services of financial advisers in the sales of bonds and notes shall be awarded to minority firms. The law specifies that all bids or proposals by underwriters or syndicates of underwriters ensure that a portion of sales are to minority investment firms. If DOA is unable to achieve the 6% participation requirement, the Secretary of DOA is required to submit a report explaining the reasons to the Legislature's Joint Committee on Finance. The 6% guideline has been achieved for current clean water fund bonds.

Moral Obligation

The Building Commission is authorized to designate, by resolution, that a legislative moral obligation exists for certain loan obligations under the environmental improvement fund. If payments

Table 14: Environmental Improvement Fund Bonds, July 1, 2018

	Bonds Authorized	Bonds Issued	Principal Outstanding
Clean water fund program	Aumonzeu	Bolius Issueu	Outstanding
general obligation	\$646,283,200	\$640,264,600	\$100,948,400
Safe drinking water loan program			
general obligation	71,400,000	69,090,100	37,800,800
Subtotal general obligation	\$717,683,200	\$709,354,700	\$138,749,200
Clean water fund program and environmental improvement fund			
revenue obligation	2,526,700,000	1,744,165,000	237,885,000
Total	\$3,244,383,200	\$2,453,519,700	\$376,634,200

from a municipality on any loan designated are insufficient, DOA could certify the amount of the insufficiency to the Secretary of DOA, the Governor and the Joint Committee on Finance. The Joint Committee on Finance would be required to introduce a bill with an appropriation of the amount needed to pay the revenue obligation. The statutes express the Legislature's expectation and aspiration to make such an appropriation if ever called upon to do so. No moral obligation designations have been made to date.

Investment Authority

DOA may purchase or acquire, negotiate, sell or otherwise dispose of environmental improvement fund loans at the price and terms it establishes. Further, DOA is authorized to direct the Investment Board to make any investment of the environmental improvement fund if it provides a financial benefit to the fund, the action does not weaken the purposes of the fund, and the Building Commission approves the investment action. The Investment Board is relieved of any obligations relevant to prudent investment in making the investments directed by DOA. The Department may also enter into agreements with the federal government, private entities or others to insure or, in any other manner, provide additional security for the state's revenue obligations.

Bonds Issued

A total of over \$3.2 billion in bonds has been

authorized for the program, including \$717.7 million in general obligation bonds and \$2.53 billion in revenue obligation bonds. This is shown in Table 14. This includes 2017 Act 59 authorization of \$5.8 million in general obligation bonds for the safe drinking water loan program and deletion of \$40.46 million for the clean water fund program that was not expected to be needed during the 2017-19 biennium. As of June 30, 2018, \$2.45 billion of obligations have been issued, and \$376.6 million in principal is outstanding.

Municipal Financing Requirements

Repayment Methods

Subject to the terms of the financial agreement between the municipality and the state, a municipality is statutorily authorized to repay environmental improvement fund loans from any legal means, including: (a) general funds; (b) proceeds of the sale of obligations; (c) proceeds of the sale of public improvements bonds; (d) proceeds of revenue obligations; (e) sewerage system or water system user charges; and (f) proceeds of special obligation bonds. In practice, municipalities repay environmental improvement fund loans through one of the following: (a) tax levy; (b) sewerage or water system user charges; or (c) proceeds from special assessments levied for the project.

Loan Anticipation Notes

If a municipality has received a commitment for an environmental improvement fund loan, but wishes to begin a project in advance of that loan, it may issue a loan anticipation note. This note could be refunded one or more times, and would be structured so that the note could be retired when the clean water fund loan is received, but not later than five years after the original date of the original obligation.

Municipal Repayment Requirements

DOA must notify DNR if a municipality fails to make a principal repayment or interest payment by its due date. DOA may then collect the amounts due by deducting them from any state payments due the municipality or may add a special charge to the amount of taxes levied on the county.

APPENDICES

Several appendices provide additional program information. These include:

- Appendix I provides a glossary of key terms to assist with understanding program terminology.
- Appendix II describes the components of a wastewater treatment facility.
- Appendix III describes the biennial finance plan process for the environmental improvement fund that includes funding and statutory requests for the upcoming biennium.
- Appendix IV lists clean water fund financial assistance agreements as of June 30, 2018.
- Appendix V lists safe drinking water loan program financial assistance agreements as of June 30, 2018.

APPENDIX I

A Glossary of Key Terms

Advanced or Tertiary Wastewater Treatment. Treatment of wastewater that is required beyond the generally-required secondary treatment.

Areawide Water Quality Management Plans. Plans prepared by the Department of Natural Resources (DNR) or a designated planning agency as required by the U.S. Environmental Protection Agency (EPA) and state statute for specific planning areas of the state. These areas are defined based upon water quality-related criteria. The plans: (a) define water quality problems in each area; (b) propose solutions; (c) delineate service areas for treatment of point source pollution; (d) identify the local agencies responsible for pollution abatement efforts; and (e) identify "best management practices" for nonpoint source pollution abatement efforts. Each plan requires approval by the Governor and EPA.

Collection System or Collector Sewer. The type of sewer that generally runs beneath streets and collects sewage from individual homes and commercial or industrial establishments. Collectors differ from lateral sewers, which are the pipes that join an individual home or establishment with a collector sewer and are privately owned and maintained. Generally, sewage flows from lateral sewers to collector sewers, to interceptors, then to the treatment plant.

Community Water System. A public water system that serves at least 15 service connections used by year-round residents of the area served by the public water system or regularly serves at least 25 year-round residents.

Compliance Maintenance. A program and actions by municipalities to maintain compliance

with a WPDES permit, intended to prevent violations of discharge limits that cause degradation of water quality.

Interceptor. The type of sewer that receives sewage from collector sewers and transports it to a sewage treatment plant. Interceptors differ from collectors in that they generally do not receive sewage from individual homes or other establishments, but are only used for conveying sewage to a treatment plant.

Lateral. A pipe that can be one of two types: (1) a pipe that carries drinking water from the public drinking water system pipe in the street to an individual residence or establishment; or (2) a pipe that is the portion of the sanitary sewer that conveys sewage from an individual residence or establishment to a public sewage collection system. Laterals, or water service lines, are generally on private property, and are privately owned and maintained.

Municipal Water System. A community water system owned by a city, village, county, town, town sanitary district, utility district, public inland lake and rehabilitation district, municipal water district or a federal, state, county, or municipalowned institution for congregate care or correction, or a privately owned water utility serving the municipality.

New and Changed Limits. This refers to pollution effluent limit changes that occur due to new or changed standards in the federal or state water pollution control laws. Examples are standards for toxic substances that are included in new rules on surface water pollution but were not a part of previous regulations except on a case-by-case basis.

Non-Community Water System. A public water system that is not a community water system. A non-community water system may be either a non-transient non-community water system or a transient non-community water system.

Nonpoint Source Pollution. Water pollution not attributable to a single, well-defined point of origin, but that is carried by rainfall or snowmelt from a variety of sources, such as storm water runoff, farm fields, barnyards, construction sites, highways, streets and parking lots.

Non-Transient Non-Community Water System. A non-community water system that regularly serves at least 25 of the same persons over six months per year. Examples include systems serving some schools, day care centers, and factories.

Point Source Pollution. Water pollution emanating from a distinct, easily-definable source such as the end of a pipe.

Primary Treatment. The least complex and least effective of three possible treatment levels, which relies on screen, filters and a settling process to mechanically remove pollutants. It is generally only 30-35% effective.

Public Water System. A system providing piped water to the public for human consumption if the water system has at least 15 service connections or regularly serves an average of at least 25 individuals for at least 60 days each year. A public water system is either a community water system or a non-community water system.

Publicly-Owned Treatment Works. The term used for a sewerage system, including collectors, interceptors, treatment facilities and other appurtenances owned by a governmental entity for the primary purpose of treating residential sewage.

Sanitary Sewer. Any pipe that conveys domestic wastewater (sanitary wastes) from its origin to

a treatment site or discharge point.

Secondary Treatment. Wastewater treatment more sophisticated than primary treatment, and which utilizes bacteria to consume organic pollutants. Proper secondary treatment eliminates 85-90% of the pollutants in wastewater.

Sewage or Wastewater Treatment Plant. The facility in a municipal sewerage system that removes pollutants before the wastewater is discharged into a lake, stream or the groundwater.

Sewerage System. A term used to describe the entire system of sewers and treatment facilities used to transport, treat and discharge sewage.

Sludge. The accumulated wastes removed from wastewater at the treatment stage and composed of a semi-liquid mass.

Storm Sewer. A pipe that collects rain runoff and conveys it to a lake or stream in order to prevent flooding in developed areas.

Transient Non-Community Water System. A non-community water system serving at least 25 persons per day at least 60 days out of the year. Examples include some commercial establishments, restaurants, motels, and campgrounds.

Urban Storm Water Runoff. Water runoff produced by established residential, commercial, industrial, institutional, and transportation land uses where the absorptive capacity of the earth is drastically reduced, due to the creation of impervious areas such as rooftops, sidewalks, street surfaces, parking areas, and other hard surfaces.

Wastewater Pollution Discharge Elimination System (WPDES). A system administered by DNR that develops permits for each discharger and spells out what requirements the municipality must meet for each point source.

APPENDIX II

Description of Wastewater Treatment Systems

In general, there are two types of systems used to treat and dispose of sewage. The first is used in urbanized areas where the density of residences and commercial establishments allow a municipal government to capture economies of scale by building a centralized system that collects wastewater from a wide area, transports it to a central site, treats the wastewater and discharges it to a nearby lake, stream or land. The other alternative is an "on-site" system, used generally in areas where residential density makes a centralized sewage system too expensive. It relies on a collection and treatment system existing on a single property and discharges the treated wastewater into the ground.

With either system, the problems to be solved are the same. The first problem is the removal of domestic sewage wastes before they can become a health problem. The second problem arises once a means of removing the wastes has been devised. These wastes must be disposed of in a way that will not pollute either surface waters--lakes or streams--or the groundwater.

Where density allows, which is generally in an urbanized area, both cost factors and the need to transport a large amount of sewage away from population areas for health reasons tend to favor a centralized sewage collection and treatment system. The major components of such a system are: (a) the collection system; (b) the transport system; and (c) the treatment and discharge system.

The Collection System

Sewage is collected from individual residences by means of a lateral sewer, which runs from the residence to a collector sewer, usually in the street adjacent to the property. Any portion of the lateral that is not on public property (typically from the curb to the home or business) is generally the responsibility of the private property owner, and not the municipality. Thus, it is generally the resident's responsibility for maintenance purposes. The collector sewer is publicly-owned and serves many residences.

The sewage collection system runs parallel to, and sometimes is part of, another system, the storm water collection system. Storm water collection is necessary to remove rain and melting snow from developed areas to prevent flooding. In the older portions of some larger cities, both domestic wastes and storm water are discharged into the same pipe, which is called a combined sewer. This type of system was often installed in the late nineteenth century or the early twentieth century and many of these systems are still in place. Storm water is not generally treated, but is conveyed and discharged directly to a lake or stream. But with combined sewers, storm water mixes with the sewage already present in the pipe, requiring all the water to be treated. Because storm water is generally much greater in volume, collection or treatment capacity may be exceeded, causing bypasses.

Transport System

Once sewage is collected from a residential or commercial area, it must be transported to the treatment plant, which may be located at considerable distance because of the need to treat the sewage near a suitable discharge point and, preferably, away from a residential area. Sewers that do the transporting (and do not receive individual lateral connections) are called interceptors. Interceptors can be any size, but are generally the largest pipes in the system. Interceptors transport the

sewage to the treatment plant by gravity, if possible. Otherwise, pump stations are used to move the sewage uphill where necessary. Sewers used to transport sewage against gravity are generally termed force mains.

Treatment and Discharge System

Once conveyed to a central site, the sewage is treated and discharged. The treatment site is referred to as a sewage treatment plant, wastewater treatment plant or publicly-owned treatment works, depending on the context. At present, most sewage is treated by a method known as secondary treatment, a system that uses bacteria to consume organic pollutants and uses screens, filters and a settling process to remove solids in the water. Frequently, the water will be disinfected as well. Once treated, the water is discharged through an outfall pipe to a lake or a stream, or is spread on land for land disposal.

The solids removed from the water are termed "sludge." Sludge disposal, often the most difficult part of the process, can be done by land

application as a fertilizer in an agricultural area, disposal in a sanitary landfill, or by processing into a fertilizer to be marketed commercially. The best-known example of commercial marketing is "Milorganite," a fertilizer produced by the Milwaukee Metropolitan Sewerage District.

If the volume of sewage is too great to be treated by a wastewater treatment plant, it can overload a plant and cause serious damage. Preventing this damage occasionally requires the provision of storage facilities, either by increasing the size of interceptor sewers or by building separate facilities. The "deep tunnels" of Milwaukee and Chicago are examples of storage facilities. If capacity is exceeded and storage is not provided, sewage is frequently diverted from the sewer system directly into a lake or stream untreated. This practice, which must be eliminated under federal and state law, is called a "bypass" or an "overflow." It can be present in any system with inadequate capacity, but is a common problem with systems containing uncorrected combined sewer problems.

APPENDIX III

Biennial Finance Plan Process

The statutes require the Departments of Administration and Natural Resources to prepare a biennial finance plan for the environmental improvement fund. This planning process includes:

Project Needs List. By May 1 of each evennumbered year, DNR is required to prepare and submit to DOA a biennial needs list that includes: (a) a list of wastewater treatment projects, drinking water projects and land recycling loan program projects that DNR estimates will apply for financial assistance during the next biennium; (b) the estimated cost and construction schedule of each of the projects; and (c) the estimated priority rank of each project. The priority score is assigned on the basis of environmental priorities defined in DNR administrative rules.

Development of the Plan. DOA and DNR are required to jointly prepare the biennial finance plan. The plan must include: (a) an estimate of wastewater treatment, safe drinking water and land recycling loan project needs of the state for the four fiscal years of the next two biennia; (b) the total amount that DOA projects will be available to provide for financial assistance to municipalities for projects during the next biennium; (c) a chart showing the sources and uses of funds for the financial assistance to be provided to municipalities during the next biennium; (d) the extent to which funding in the clean water fund program and the safe drinking water loan program would be maintained in perpetuity; (e) audited financial statements of the past operations and activities of the clean water fund program, the safe drinking water loan program and the land recycling loan program; (f) the estimated EIF capital available in each of the next four fiscal years for the clean water fund program and the safe drinking water loan program; (g) the projected fund balance for the clean water fund

and safe drinking water loan program for each of the next 20 years given existing obligations and financial conditions; (h) the percentage of market interest rate for the projects to be funded during the biennium; (i) the amount of any service fee to be charged to any applicant during the next biennium; and (j) the impact of the biennial finance plan on a guideline related to water pollution abatement debt service, which is that all state water pollution abatement general obligation bond debt service costs not exceed 50% of all general obligation debt service costs to the state.

Biennial Finance Plan Review. By October 1 of each even-numbered year, DNR and DOA are required to submit copies of the biennial finance plan to the State Building Commission, the Joint Committee on Finance and the standing committees of the Legislature having jurisdiction over environmental issues. DNR and DOA must submit an amended plan reflecting the Governor's biennial budget recommendations to those committees and the Building Commission within 30 days after the Governor's biennial budget submission. DNR and DOA must submit an updated plan, with any enacted modifications, no later than 30 days after the Governor signs the biennial budget act. The Building Commission has the authority to approve or disapprove any part of the plan other than the subsidy and bonding authorizations approved by the Legislature.

Report to the Legislature. No later than November 1 of each odd-numbered year, DOA and DNR are required to jointly submit a report to the Building Commission, Joint Committee on Finance and the appropriate standing committees of the Legislature. The report is to contain information on the operations and activities of the environmental improvement fund for the previous biennium.

APPENDIX IV

Municipality	Amount	Municipality	Amount
Adams	#2 464 060	Calumet (continued)	ф 7 040 1 2 с
Adams, City	\$2,464,069	Hilbert, Village	\$7,048,126
Ashland		New Holstein, City	3,948,117
Ashland, City *	13,324,630	Sherwood, Village	2,710,650
Butternut, Village	394,519	Chippewa	
Madeline SD	590,999	Bloomer, City	8,049,020
Mellen, City *	2,564,006	Chippewa Falls, City	11,877,327
· · · · · · · · · · · · · · · · · · ·	, ,	New Auburn, Village	555,481
Barron		Tio w Tao arii, y mage	555,.61
Cameron, Village	270,137	Clark	
Chetek, City *	1,068,753	Abbotsford, City	1,403,359
Crystal Lake SD #1 *	299,316	Colby, City	2,837,013
Cumberland, City	1,427,675	Curtiss, Village *	1,761,308
Dallas, Village	481,364	Dorchester, Village	443,729
Haugen, Village	284,539	Greenwood, City	2,013,792
		Loyal, City	728,665
Bayfield		Neillsville, City	3,237,767
Bayfield, City *	9,761,995	Owen, City *	3,674,018
Iron River SD #1	716,537	•	
Pikes Bay SD	1,620,600	Columbia	
		Arlington, Village	1,661,852
Brown		Cambria, Village **	603,350
Allouez, Village **	4,032,120	Columbus, City	6,017,582
Bayshore SD	946,574	Harmony Grove - Okee SC	2,326,813
Bellevue, Village	23,707	Lodi, City	4,049,571
De Pere, City	916,322	Portage, City	5,508,632
Denmark, Village	5,158,767	Poynette, Village	2,287,561
Dyckesville SD	3,126,990	Rio, Village	1,463,282
Green Bay MSD **	293,336,045	Wisconsin Dells	5,510,725
Holland SD #1	1,379,790	Wisconsin Dells - Lake Delton SC	1,935,060
Morrison SD #1 *	2,937,649	Wyocena, Village	389,253
Oneida Tribe *	1,507,211	•	
Pulaski, Village *	5,091,382	Crawford	
Royal Scot SD *	1,494,150	Eastman, Village *	2,505,580
Suamico, Village	9,939,969	Gays Mills, Village	180,185
Wrightstown SD #1	1,464,548	Prairie du Chien, City	5,628,300
Wrightstown, Village	6,225,722	Seneca SD #1 *	130,000
		Valley Ridge CWC *	6,185,231
Buffalo		Wauzeka, Village	128,137
Fountain City	450,556	D	
Nelson, Village *	781,610	Dane	0.051.600
		Belleville, Village	9,251,632
Burnett		Black Earth, Village	5,261,764
Danbury SD *	1,105,020	Blue Mounds, Village	1,152,260
Grantsburg, Village	328,436	Brooklyn, Village	4,958,682
St. Croix Chippewa *	1,657,530	Cambridge, Village	6,675,514
Webster, Village	204,020	Cottage Grove, Village	7,188,424
		Cross Plains, Village	11,072,837
Calumet		Dane, Village	1,227,831
Brillion, City	1,064,130	Deerfield, Village	5,070,284
Chilton, City	5,736,871	Madison MSD	243,682,491
Forest Junction SD	1,527,450	Marshall, Village	7,744,261

Municipality	Amount	Municipality	Amount
Dane (continued)		Eau Claire	
Mazomanie, Village	\$4,752,614	Altoona, City **	\$710,450
Middleton, City **	93,528	Eau Claire, City	41,395,988
Mount Horeb, Village	21,960,654	Fairchild, Village	575,000
Oregon, Village	6,784,531	i direilia, village	373,000
Pleasant Springs SD #1	1,029,086	Florence	
Rockdale, Village	876,526	Aurora SD #1 *	191,860
Roxbury SD #1	939,610		
Stoughton, City		Fond du Lac	
	14,746,057	Calumet SD #1 *	4,317,124
Sun Prairie, City	16,114,376	Campbellsport, Village	1,870,861
Windsor, Village *	824,608	Consolidated SD #1	155,438
		Fairwater, Village	1,554,473
Dodge		Fond du Lac, City **	65,240,132
Ashippun SD	4,488,890	Mount Calvary, Village *	1,536,234
Beaver Dam, City **	21,452,848	North Fond du Lac, Village	2,591,575
Brownsville, Village	587,866	Oakfield SD #1 *	22,000
Horicon, City	637,813		
Hustisford, Village	445,801	Ripon, City	6,337,088
Iron Ridge, Village	1,440,700	Forest	
Juneau, City	1,365,108		1 527 025
Kekoskee, Village	661,089	Crandon, City	1,537,025
Lebanon SD #1	605,529	Laona SD #1	746,282
Leroy SD #1	196,574	Grant	
Lomira, Village	4,963,465		229,081
Lowell, Village	2,751,001	Bagley, Village	
Mayville, City	3,151,376	Blue River, Village	281,218
Portland SD #1	294,519	Boscobel, City	1,336,536
Randolph, Village	3,201,395	Cassville, Village *	4,466,532
Reeseville, Village *	429,613	Cuba City, City	2,561,791
		Lancaster, City	1,688,158
Waupun, City	6,249,200	Montfort, Village	779,050
Door		Muscoda, Village	897,991
Egg Harbor, Village	508,048	Platteville, City	6,558,734
	1,629,117	Potosi, Village	291,485
Ephraim, Village	585,275	Potosi/Tennyson SC	1,543,111
Forestville, Village		Tennyson, Village	212,217
Washington, Town *	658,367		
Douglas		Green	1 222 122
Brule SD	367,167	Albany, Village	1,232,123
Gordon SD #1 *	1,444,933	Brodhead, City	7,198,867
Lake Nebagamon, Village	1,538,776	Monroe, City	26,442,131
Oliver, Village	588,000	Monticello, Village *	4,033,418
	320,531	New Glarus, Village	10,885,368
Poplar, Village Superior, City **		~	
Superior, City ***	15,246,901	Green Lake	
Dunn		Green Lake SD	8,673,929
Boyceville, Village	410,943	Green Lake, City	3,506,719
Elk Mound, Village *	419,030	Little Green LPRD	1,898,268
Knapp, Village	668,732	Markesan, City	563,196
	13,749,149	Princeton, City	289,559
Menomonie, City			
Sand Creek SD #1	367,860 350,745		
Wheeler, Village *	359,745		

Municipality	Amount	Municipality	Amount
Iowa		La Crosse	
Arena, Village	\$1,485,515	Bangor, Village	\$1,587,060
Avoca, Village	358,641	Mindoro SD #1	1,113,920
Dodgeville, City	9,070,500	Onalaska, City **	99,309
Highland, Village	824,848	Rockland, Village	967,311
Iowa County	485,993	St. Joseph's SD #1	1,562,042
Linden, Village	388,913	West Salem, Village	4,990,006
Mineral Point, City	6,883,912	, 2	
·		Lafayette	
Iron		Argyle, Village *	1,466,993
Mercer SD #1 *	4,769,971	Belmont, Village	3,905,957
Montreal, City	1,799,308	Benton, Village	1,100,000
		Darlington, City	5,429,000
Jackson		Gratiot, Village	723,629
Black River Falls, City	4,227,766	Shullsburg, City	686,556
Hatfield SD #1	1,134,541	South Wayne, Village *	1,387,982
Ho-Chunk Nation	10,562,985	Bouil Wayne, Village	1,507,502
Merrillan, Village	648,435	Langlade	
		Antigo, City	4,316,557
Jefferson		Elcho SD #1 *	2,891,067
Blue Spring LMD	380,000	Lieno SD #1	2,071,007
Fort Atkinson, City	14,593,965	Lincoln	
Ixonia, Town	1,339,941		4,044,352
Jefferson, City	7,533,927	Merrill, City	
Johnson Creek, Village	2,821,245	Tomahawk, City	6,727,975
Lake Mills, City	1,245,823	3.5	
Oakland SD #1	5,767,653	Manitowoc	2 (00 072
Waterloo, City	1,835,988	Cleveland, Village	3,609,973
Watertown, City	30,534,659	Kiel, City	2,469,987
watertown, City	30,334,039	Manitowoc, City	33,511,977
Immoon		Mishicot, Village	4,105,629
Juneau	52 6 001	Reedsville, Village	2,768,023
Camp Douglas, Village	526,091	Rockland SD #1 *	1,131,375
Lyndon Station, Village	614,582	Saint Nazianz, Village **	909,349
Mauston, City	2,904,892	Two Rivers, City **	13,021,998
Necedah, Village	2,937,094	Valders, Village	1,537,527
New Lisbon, City *	13,701,372	Whitelaw, Village	1,494,310
O'Dell's Bay SD #1	475,000		
Union Center, Village *	995,704	Marathon	
		Athens, Village	2,428,846
Kenosha		Brokaw, Village	969,429
Bristol, Village	6,363,516	Edgar, Village	554,860
Kenosha, City	33,143,758	Marathon City, Village	1,890,253
Paddock Lake, Village	10,195,208	Mosinee, City	1,382,570
Salem Lakes, Village *	26,338,765	Rib Mountain MSD	7,594,719
Twin Lakes, Village	8,805,874	Rothschild, Village	427,513
		Spencer, Village	2,977,260
Kewaunee		Stratford, Village	412,141
Algoma, City	6,065,529		112,111
Kewaunee, City	1,684,316	Marinette	
Luxemburg, Village	3,178,375	Coleman, Village	1,224,329
	•	Crivitz, Village *	2,753,364
		Citvitz, vinage	2,733,304

Municipality	Amount	Municipality	Amount
Marinette (continued)		Outagamie (continued)	
Goodman SD #1 *	3,591,667	Heart of the Valley MSD	40,884,163
Marinette, City **	\$2,394,284	Hortonville, Village	5,533,330
Niagara, City	180,905	Kaukauna, City **	\$56,394
Peshtigo, City	1,808,056	Little Chute, Village **	853,232
Wausaukee, Village *	3,219,189	0 1	
		Ozaukee	4.520.240
Marquette		Belgium, Village	4,538,340
Montello, City	260,000	Saukville, Village	11,331,624
Packwaukee SD #1 *	1,137,353	Pepin	
Westfield, Village	50,202	Pepin, Village	363,096
Milwaukee		Pierce	1 222 525
Bayside, Village	1,611,799	Bay City, Village	1,223,535
Cudahy, City	885,875	Ellsworth, Village	4,406,566
Franklin, City	27,562,754	Plum City, Village	1,685,337
Milwaukee, City **	197,393,776	Prescott, City	5,348,532
Milwaukee MSD **	1,396,986,626	River Falls, City	4,766,364
Shorewood, Village	2,511,820	Spring Valley, Village	120,038
South Milwaukee, City	13,575,177	Dall.	
West Allis, City ***	3,652,696	Polk	2.050.510
Whitefish Bay, Village	8,328,641	Amery, City	3,059,518
Monroe		Cushing SD #1 *	116,391
Kendall, Village *	5,174,789	Frederic, Village	939,294
Melvina, Village *	1,396,266	Luck, Village	730,000
Oakdale, Village *	452,118	Milltown, Village	336,697
		Osceola, Village	6,420,367
Sparta, City *** Tomah, City ***	15,726,198 16,429,641	St. Croix Falls, City *	8,870,000
		Portage	
Warrens, Village	4,541,595	Almond, Village	530,199
Oconto		Junction City, Village	449,150
Brazeau SD #1	793,405	Plover, Village	9,427,735
Gillett, City	2,853,337	Rosholt, Village	662,272
Kelly Lake SD #1	2,438,725	Stevens Point, City	16,579,444
Lena, Village	342,586	Stevens Form, City	10,577,111
Little Suamico SD #1	2,518,724	Price	
Oconto Falls, City	11,095,333	Ogema SD #1	190,020
Oconto, City	3,843,974	Park Falls, City *	4,408,514
Pensaukee SD #1 *	4,264,592	Phillips, City	2,233,227
Oneida		Prentice, Village	544,000
Lake Tomahawk SD #1	1,316,600	Tronvice, vinage	2,000
Rhinelander, City **	34,222,349	Racine	
Killielander, City	34,222,349	Bohners Lake SD #1	8,007,212
Outagamie		Burlington, City	32,070,034
Appleton, City **	16,945,143	Caledonia, Village	14,892,431
Bear Creek, Village	431,809	Dover, Town	1,787,182
Black Creek, Village	6,656,491	Norway SD #1	6,227,685
Buchanan, Town **	77,370	Racine, City	111,911,739
Combined Locks, Village **	433,024	Union Grove, Village	8,705,940
Freedom SD #1	2,748,197	Waterford, Village	1,134,587
Garners Creek Storm Water Utility **	1,110,807	Western Racine Co. Sewerage Dist	11,458,830
Greenville SD #1	2,739,721		,, 0

Municipality	Amount	Municipality	Amount
Richland			
Boaz, Village *	\$1,086,464	Sheboygan	¢000.061
Germantown SD *	342,270	Adell - Onion River, Village *	\$989,061
Hub-Rock SD #1 *	1,902,950	Adell, Village *	776,339
Ithaca SD #1 *	1,160,926	Cascade, Village	1,200,000
Richland Center, City	10,615,010	Cedar Grove, Village	3,823,284
Sextonville SD *	641,864	Gibbsville SD	1,518,190
Viola, Village	468,061	Hingham SD - Onion River *	678,833
•		Hingham SD *	79,082
Rock		Howards Grove, Village	2,102,385
Beloit, City	6,795,991	Kohler, Village	400,920
Beloit, Town	5,628,026	Little Elkhart Lake Rehab District *	2,173,589
Clinton, Village	4,962,444	Plymouth, City ***	5,848,472
Edgerton, City	7,478,225	Random Lake, Village	1,919,396
Evansville, City **	12,695,498	Sheboygan, City ***	19,547,274
Footville, Village	1,645,467	Waldo, Village	2,748,294
Fulton SD #2 *	1,669,311	Taylor	
Janesville, City	33,704,355	Chelsea SD *	80,000
Koshkonong CSC	4,018,051	Rib Lake, Village	6,473,120
Milton, City	4,328,415	Stetsonville, Village	1,140,962
Orfordville, Village	351,040	Westboro SD #1 *	278,608
Rusk		Westbolo SD #1	278,008
Ladysmith, City	2,530,534	Trempealeau	
Sheldon, Village *	2,330,334	Arcadia, City	386,792
Sheldon, vinage	292,323	Blair, City	880,970
Saint Croix		Galesville, City	1,730,714
Baldwin, Village **	645,190	Independence, City	1,591,695
Hammond, Village	4,100,924	Osseo, City	1,575,170
Hudson, City	7,242,341	Trempealeau, Village	1,558,545
New Richmond, City ***	4,123,567	Whitehall, City	1,389,624
North Hudson, Village	640,849	···, <i>v</i>	-,,
Richmond SD #1 *	46,884	Vernon	
Roberts, Village	3,193,935	De Soto, Village	256,764
Somerset, Village	2,980,623	Hillsboro, City	2,552,631
		Readstown, Village	178,000
Sauk		Stoddard, Village	555,571
Baraboo, City	8,310,063	Viroqua, City *	6,116,347
Christmas Mountain SD	1,658,960	Westby, City	416,803
Ironton, Village *	1,145,445	•	
Lake Delton, Village	28,882,689	Vilas	
North Freedom, Village	498,048	Eagle River, City	3,562,886
Prairie du Sac, Village	205,400		
Reedsburg, City	22,310,663	Walworth	
Spring Green, Village	949,856	Bloomfield, Village *	17,726,109
Shawano		Country Estates SD *	1,364,970
Bowler, Village	114,748	Delavan, City ***	1,102,089
Caroline SD *	312,016	East Troy, Village	10,101,675
Cloverleaf Lakes SD #1	1,021,778	Fontana, Village **	5,113,918
Green Valley SD #1 *	468,964	Genoa City, Village	4,226,574
Krakow SD #1	625,000	Lake Como Beach SD *	15,502,380
Mattoon, Village	398,340	Lyons SD #2	2,614,169
Shawano, City	2,361,297	Pell Lake SD #1 *	1,452,302
Wolf TPC	12,847,006	Sharon, Village	2,659,291
	12,077,000	-	

Municipality	Amount	Municipality	Amount
Walworth (continued) Walworth County MSD Walworth, Village ** Whitewater, City **	\$45,160,676 1,587,077 30,140,101	Waupaca (continued) Waupaca, City Weyauwega, City	\$12,422,741 9,470,487
•	50,140,101	Waushara	
Washburn	4 106 401	Hancock, Village	150,800
Birchwood, Village **	4,196,491 1,095,194	Poy Sippi SD	223,000
Minong, Village Shell Lake, City **	1,554,354	Redgranite, Village *	5,537,215
Spooner, City	355,488	Silver Lake SD * Wautoma, City *	2,263,601 3,233,999
Washington		·	
Hartford, City	13,168,455	Winnebago	2.124.556
Hartford, Town *	3,143,418	Algoma SD #1 *	3,124,776
Jackson, Village	6,130,258	Black Wolf SD #1	4,327,485
Kewaskum, Village	9,423,144	Butte des Morts CSD #1 *	2,936,650
Newburg, Village	1,549,070	Edgewood-Shangri La SD	1,011,312
Silver Lake SD *	3,461,172	Fox Crossing, Village **	5,313,516
Slinger, Village	7,007,668	Grand Chute - Menasha West SC **	42,804,650
West Bend, City	292,300	Island View SD	2,764,149
West Bella, City	292,300	Menasha, City	5,187,450
Waukesha		Neenah SD #2 *	3,056,893
Brookfield SD #4	5,749,787	Neenah, City **	1,711,792
Brookfield, City **	33,480,280	Neenah, Town **	255,841
Delafield - Hartland PCC	10,000,000	Neenah-Menasha SC	21,440,310
Delafield, City	1,555,831	Omro, City	3,510,030
Dousman, Village **	6,535,035	Omro, Town **	46,181
Lannon, Village *	12,459,777	Orihula SD	2,521,626
Lisbon SD #1	2,848,788	Oshkosh, City	34,082,669
Menomonee Falls, Village	886,867	Sunset Point SD	685,894
Nashotah, Village	285,677	Winneconne SD #3	2,078,897
Oconomowoc, City	5,449,057	Winneconne, Village	1,668,622
Oconomowoc, Town	6,819,232		
Pewaukee, City	8,049,176	Wood	
Pewaukee, Village	8,191,015	Hewitt, Village *	1,602,188
Summit, Village	7,831,586	Marshfield, City	24,169,823
Sussex, Village	18,841,702	Nekoosa, City	3,260,437
Waukesha, City	90,654,914	Pittsville, City	2,768,052
Waliosia, City	, 0,00 .,,, 1 .	Port Edwards, Village	3,367,924
Waupaca		Rudolph, Village **	286,660
Chain O'Lakes SD #1	2,081,670	Vesper, Village	1,724,160
Clintonville, City ***	1,035,461	Wisconsin Rapids, City **	46,887,749
Fremont, Village	1,866,706		
Manawa, City	1,408,334	Grand Total	\$4,610,083,419
SD = Sanitary District		MSD = Metropolitan Sewerage District	
SC = Sewage Commission CSD = Consolidated Severage District		CSC = Consolidated Sanitary Commission	n
CSD = Consolidated Sewerage District RD = Rehabilitation District		TPC = Treatment Plant Commission LMD = Lake Management District	
LPRD = Lake Protection and Rehabilitation D	District	CWC = Clean Water Commission	
PCC = Pollution Control Commission			
* = Includes financial hardship assistance ** = Includes financing under the federal		interest rate or 33% of market interest rate as of July, 20 sinvestment Act of 2009	17.
*** = Includes a land recycling loan.		and the or body	

APPENDIX V

Municipality	Amount	Municipality	Amount
Adams		Clark	
Adams, City */**	\$900,937	Abbotsford, City	\$701,970
Rome, Town	4,481,197	Colby, City */**	1,959,713
, , , , , , , , , , , , , , , , , , , ,	, - ,	Curtiss, Village *	2,252,546
Ashland		Dorchester, Village *	586,406
Ashland, City *	3,928,766	Granton, Village *	456,031
Butternut, Village */**	1,466,776	Greenwood, City *	3,464,878
Glidden SD */**	175,754	Loyal, City */**	819,527
		Thorp, City *	2,265,146
Barron		Withee, Village */**	2,577,634
Barron, City *	646,678	•	
Cameron, Village *	2,421,085	Columbia	460.702
Cumberland, City */**	2,878,248	Arlington, Village	469,723
Dallas, Village *	852,046	Columbus, City	300,000
Rice Lake, City	933,332	Friesland, Village	733,212
Turtle Lake, Village */**	3,750,947	Portage, City	121,379
		Rio, Village **	420,823
Bayfield		Crawford	
Bayfield, City *	2,827,109	Eastman, Village *	923,706
		Prairie du Chien, City *	2,803,236
Brown		_	
Allouez, Village	4,688,269	Dane	
Central Brown Co. Water Authority	12,958,106	Belleville, Village	1,490,842
Green Bay, City	800,000	Black Earth, Village	1,248,397
Hobart, Village	1,123,268	Cambridge, Village **	659,060
Holland SD #1 **	233,437	Cottage Grove, Village	4,692,948
Wrightstown SD #1	470,152	Cross Plains, Village	3,280,065
Wrightstown, Village	8,683,218	Dane, Village	1,634,203
Buffalo		Deerfield, Village **	1,080,941
Cochrane, Village *	454,324	Marshall, Village	579,517
Fountain City, City	634,236	Oregon, Village	432,818
Tourium City, City	031,230	Stoughton, City ** Windsor, Village *	1,227,502 1,054,634
Burnett		willusor, village	1,034,034
Grantsburg, Village *	1,178,210	Dodge	
Siren, Village *	825,191	Brownsville, Village	428,997
Webster, Village *	829,380	Horicon, City **	3,271,616
		Hustisford, Village	1,057,341
Calumet		Lomira, Village **	1,063,630
Brillion, City	1,689,997	Mayville, City	1,854,243
Chilton, City	526,734	Randolph, Village	1,295,504
Forest Junction SD	1,254,915	Reeseville, Village *	491,305
New Holstein, City	716,604	T.	
Sherwood, Village **	1,980,380	Door	200,000
China		Sturgeon Bay, City	300,000
Chippewa Chippewa Falls, City **	5 109 270	Eau Claire	
Cornell, City	5,198,379 1,826,166	Altoona, City	490,327
Lake Halle, Village	2,516,139	Augusta, City *	1,700,000
New Auburn, Village *	1,205,891	Eau Claire, City	800,000
Stanley, City */**	1,810,082	Fairchild, Village *	665,000
Sumoj, City	1,010,002	Fall Creek, Village	1,450,265

Municipality	Amount	Municipality	Amount
Florence		Juneau	
Florence, Town	\$325,000	Elroy, City *	\$1,558,464
Tiorence, Town	Ψ323,000	Lyndon Station, Village */**	1,217,276
Fond du Lac		Necedah, Village *	2,321,970
Campbellsport, Village	240,583	New Lisbon, City *	2,679,377
Fond du Lac, City	33,243,990	New Lisbon, City	2,079,377
North Fond du Lac, Village	100,000	I o Chorso	
Oakfield, Village	2,200,000	La Crosse	1 265 000
Saint Cloud, Village	934,679	Holmen, Village	1,365,000
Samt Cloud, Village	934,079	Onalaska, City	3,080,371
Grant		Rockland, Village	343,248
Blue River, Village */**	609,631	West Salem, Village	3,058,893
Cassville, Village *	410,102		
		Lafayette	
Dickeyville, Village	1,078,163	Benton, Village *	601,600
Livingston, Village	104,175	Darlington, City */**	516,588
Mount Hope, Village	683,500	Shullsburg, City *	871,155
Platteville, City	510,000	South Wayne, Village *	1,571,868
Tennyson, Village	159,914	Wiota SD#1 *	74,096
Green		Langlade	
Albany, Village	379,990	Antigo, City	600,000
Browntown, Village	432,523	Elcho SD #1 *	187,734
Monroe, City	300,000		
		Lincoln	
Green Lake		Merrill, City	2,197,117
Berlin, City	1,687,900	•	
Markesan, City *	1,461,868	Manitowoc	
Princeton, City *	868,624	Manitowoc, City	1,053,496
•		Reedsville, Village	1,647,018
Iowa		Saint Nazianz, Village	956,170
Arena, Village	141,195	Two Rivers, City **	8,651,681
Avoca, Village */**	481,637	, ,	, ,
Highland, Village	556,482	Marathon	
Mineral Point, City	699,173	Brokaw, Village *	729,854
Rewey, Village *	123,713	Mosinee, City	2,947,999
. ,	- 7	Rothschild, Village	395,434
Iron		Schofield, City	150,000
Hurley, City */**	197,333	Spencer, Village	1,093,568
		Stratford, Village	2,809,527
Jackson		Wausau, City	675,600
Alma Center, Village	672,073	, 2-15	,
Black River Falls, City *	982,692	Marinette	
Merrillan, Village *	627,303	Goodman SD #1 *	611,093
, 2	,	Marinette, City **	26,231,979
Jefferson		Peshtigo, City	5,387,773
Jefferson, City	2,111,054	. .	, , , -
Lake Mills, City	300,000	Milwaukee	
Waterloo, City	300,000	Cudahy, City	300,000
Watertown, City	10,757,910	Greendale, Village	5,222,022
	10,101,010	Milwaukee, City *	80,141,012
		Oak Creek, City **	16,007,242
		Jan Croon, City	10,007,272

Municipality	Amount	Municipality	Amount
Milwaukee (continued)		Price	
Saint Francis, City	\$450,000	Park Falls, City *	\$6,726,965
South Milwaukee, City	14,787,921	Phillips, City *	1,479,891
West Allis, City	1,858,421	1,	,,
West Milwaukee, Village	640,025	Racine	
		Burlington, City	3,326,093
Monroe		Racine, City	33,074,385
Cashton, Village	506,780	Union Grove, Village **	3,406,477
Kendall, Village *	535,989		
Sparta, City *	1,229,543	Richland	
Tomah, City *	5,996,350	Cazenovia, Village */**	657,596
Warrens, Village *	583,621	Lone Rock, Village *	755,700
		Richland Center, City */**	1,731,933
Oconto		Viola, Village *	399,454
Gillett, City	1,624,729	ъ. т	
Lena, Village	3,285,288	Rock	405 125
Oconto Falls, City */**	3,217,306	Footville, Village	485,135
Suring, Village */**	1,609,144	Janesville, City	4,041,250
Omelde		Orfordville, Village	969,220
Oneida Rhinelander, City *	5,782,884	Rusk	
Three Lakes SD#1 *	517,621	Hawkins, Village *	203,783
Tillee Lakes SD#1	317,021	Ladysmith, City *	5,216,200
Outagamie		Eddysiniai, City	3,210,200
Greenville SD #1 **	4,431,687	Saint Croix	
Little Chute, Village	1,306,472	Glenwood City, City *	853,098
Seymour, City	2,337,849	Hudson, City	1,866,120
seymour, only	2,007,019	New Richmond, City	399,477
Ozaukee		, •	,
Belgium, Village	1,174,954	Sauk	
Fredonia, Village	965,235	Baraboo, City	250,000
Port Washington, City	3,403,700	Bluffview SD *	694,598
ъ .		Lake Delton, Village *	6,504,966
Pepin	561.560	Prairie du Sac, Village	1,769,682
Pepin, Village *	561,760	Reedsburg, City **	770,327
Diamaa		West Baraboo, Village **	1,422,982
Pierce Ellsworth, Village	408,852	G.	
Spring Valley, Village	1,082,682	Sawyer	507.700
Spring vancy, vinage	1,002,002	Radisson, Village *	597,708
Polk		Shawano	
Luck, Village *	544,888	Bowler, Village *	1,071,128
Osceola, Village **	298,874	Mattoon, Village *	229,742
St. Croix Falls, City *	1,176,708	Mattoon, vinage	227,712
•		Sheboygan	
Portage		Cedar Grove, Village	576,593
Amherst, Village **	1,156,314	Elkhart Lake, Village	190,000
Junction City, Village *	1,861,856	Random Lake, Village	809,299
Plover, Village	3,326,712	Sheboygan, City	7,409,030
Stevens Point, City **	13,959,968	· - · ·	
Whiting, Village **	666,102		

Municipality	Amount	Municipality	Amount
Taylor		Waukesha	
Rib Lake, Village */**	\$688,719	Eagle, Village	\$2,161,248
•		Mukwonago, Village	2,513,797
Trempealeau		Muskego, City **	907,948
Arcadia, City *	6,985,922	New Berlin, City	2,582,392
Blair, City *	2,565,792	Waukesha, City	1,926,054
Trempealeau, Village **	2,834,962		
Whitehall, City */**	5,240,138	Waupaca	
		Clintonville, City *	4,224,825
Vernon		Waupaca, City *	1,306,033
Chaseburg, Village	1,022,296	•	
Genoa, Village *	75,010	Waushara	
Hillsboro, City *	992,574	Hancock, Village *	1,305,168
Ontario, Village *	612,078	Redgranite, Village *	893,921
Readstown, Village *	15,257	Wautoma, City *	3,613,642
Viroqua, City *	3,208,677	•	
Westby, City	469,197	Winnebago	
		Algoma SD #1 **	14,196,701
Vilas		Menasha, City	16,381,154
Eagle River, City	500,000	Neenah, City	26,389,967
		Oshkosh, City	37,121,726
Walworth		•	
Delavan, City	2,739,708	Wood	
Elkhorn, City	9,449,114	Biron, Village	2,091,776
Fontana, Village	1,664,500	Marshfield, City	500,000
Williams Bay, Village	884,800	Nekoosa, City	4,273,175
		Pittsville, City	2,121,871
Washburn		Wisconsin Rapids, City	300,000
Minong, Village *	498,131		
Shell Lake, City *	751,921	Grand Total	\$708,040,431
Washington			
Germantown, Village **	1,942,940		

SD = Sanitary District

^{* =} Includes financing at 33% of market interest rate based on financial need criteria

^{** =} Includes financing under the federal American Recovery and Reinvestment Act of 2009